REPORT DOCUMENTATION PAGE

Form Approved

OMB No. 0704-0188

| METONT DOC | OWENTATION | | | OMB No. 0704-0188 |
|---|--|--|--|--|
| Rud in report on obsider for the Viji Ali, in sidentiate Latterning and must and op the data (seeded land for the letting in officers and office on glougestics for the Calvis engines, Suite 1204 architecture 4, 2222,4302 | www.www.www.www.www.www.www.www.www.ww | per insponse individing meadquarters Sending meadquarters Sending | o the time for reviewing comments regarding to Corectorate for informa • Reguesting Propert M702 | instructions, searching existing data sources, siburden estimate or any other aspect of this stion Operations and Reports, 1215 Jefferson (J. 1981) was sourced. |
| AGENCY USE ONLY (Leave blank) | 2. REPORT DATE 1 May 96 | CONTRACTOR OF THE PROPERTY OF | T TYPE AND DAT | |
| 4. TITLE AND SUBTITLE | AND THE PROPERTY OF THE PROPER | NORTHWEST OF THE REST OF THE PROPERTY OF THE P | 1 5. FU | INDING NUMBERS |
| A Concept Analysis of N | ursing Case Manag | ement | A LI LA LONG TOPPE AND THE STATE OF THE STAT | |
| 6. AUTHOR(S) | | | | |
| Kim Simmons | | | | |
| 7. PERFORMING ORGANIZATION NAME | (S) AND ADDRESS(ES) | | | RFORMING ORGANIZATION PORT NUMBER |
| AFIT Student Attending: | | | | |
| ATTI Student Attending. | University of Ci | ncinnati | | 96-029 |
| 9. SPONSORING MONITORING AGENCY | | ES) | | PONSORING MONITORING GENCY REPORT NUMBER |
| DEPARTMENT OF THE AIR FO | ORCE | | Action - Action | |
| 2950 P STEET, BLDG 125 | | | e age | |
| WRIGHT-PATTERSON AFB O | H 45433-7765 | | r-water-transfal | |
| 11. SUPPLEMENTARY NOTES | na da antiponigi, suppa pelakhuluk kaharat fireksi keria, suppa kaharat kelaksi kelaksi kelaksi kelaksi kelaks | | | |
| 12a. DISTRIBUTION AVAILABILITY STAT Approved for Public Release IAW Distribution Unlimited | V 190-1 | | 12b. I | DISTRIBUTION CODE |
| BRIAN D. GAUTHIER, MSgt, U Chief Administration | SAF | | 19960 |)816 033 - |
| 13. ABSTRACT (Maximum 200 words) | - minipudo Contro Helpho-Computativa, en el entro in tradition en recalità Phonomenia della Phonomenia della P | | 10000 | /010 000 - |
| | | | | |
| | | DT | IC QUALITY I | nspected 4 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| 14. SUBJECT TERMS | ** UNIQUIDATE NELLA PERMENTINA LI LICENTINA PERMENTINA PERMENTINA ARCHITECTURA PERMENTINA PERMENTINA PERMENTINA | Names and the second | arverkessivirkishaatileissikretarilassaa yvessa elikussionada kassionada kassionada kassionada | 15. NUMBER OF PAGES |
| | | | | 16. PRICE CODE |
| 17. SECURITY CLASSIFICATION (18. S | ECURITY CLASSIFICATION | 19. SECURITY | / CLASSIFICATION | 20. LIMITATION OF ABSTRACT |
| | OF THIS PAGE | OF ABST | | |

A CONCEPT ANALYSIS OF NURSING CASE MANAGEMENT

A thesis submitted to the

Division of Graduate Research and Advanced Studies of the University of Cincinnati

in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN NURSING in the College of Nursing and Health

1996

by

Kim Simmons
B.S.N. University of Cincinnati, 1988
and
Kay M. Murphy
B.S.N. Alderson Broaddus College, 1979

UNIVERSITY OF CINCINNATI

| | - | May 1 | , 19 ⁹⁶ |
|-------------------------------|--------------|-------------|--------------------|
| I, Kim Simmor | ns/Kay M. M | lurphy | |
| hereby submi | - | • | , |
| requirements Master of Sc: | | • | |
| in | | | |
| It is entitled_ | A Concept | Analysis o | f Nursing |
| Case Manager | nent | | |
| | | | |
| | | | • |
| | Approve | ed by: | |
| - | madelun | | |
| | Jeanne II | 1. Felbling | ES ED RN |
| | Trusa X | Mohman | KN Phi |
| Sla | rhan H. H | hadina. | M. Dr.Se |
| - | | | |
| | | | - |

Abstract

Concept Analysis of Nursing Case Management

This investigation examined the concept of nursing case management using Rodgers' (1993) framework of concept analysis. A comprehensive computer search of literature indexed in the disciplines of nursing, medicine, psychology, and sociology yielded a sample of 351 articles in which nursing case management was addressed. Since many descriptions of nursing case management exist, there is difficulty and confusion in defining the role of nursing in case management. This finding, in conjunction with the expanding need for case management, led to the development of a research project directed at the clarification of the concept of nursing case management. The purpose of a concept analysis is to clarify the way the concept is used in practice. Using Rodgers' framework, data were separated into six major categories: (1) surrogate terms; (2) related concepts; (3) references; (4) antecedents; (5) attributes; and (6) consequences. As each article in the sample was evaluated, statements that focused on the major categories were identified. Data in the form of word phrases, or terms, were derived from the content of each article on each major category. Certain terms were placed in different categories depending on how they were used in a particular article, for example managed care could be either a surrogate term or a related concept. Discovering many surrogate terms provided evidence that there was difficulty agreeing upon a definition of nursing case management. Managed care, one of the related concepts discovered, indicated nursing case management was an integral part of the managed care puzzle. Two main references were identified: setting and population. The variety of terms in these areas indicated there was significant

flexibility of nursing case management. Antecedents, catalysts of the need for nursing case management, addressed in the literature included: issues of cost containment, fragmentation of care, and complex client needs. Based on the literature review, 65 different attributes were found that characterized the activities performed in the practice of nursing case management. Attributes was considered to be the most important category. Some of the most frequently occurring attributes were: collaboration, planning, assessment, coordinating, evaluating, monitoring, and educating. Consequences demonstrated that nursing case management had generally impacted positively upon high healthcare costs, fragmentation of care, and complex client needs. Temporal changes in all categories were demonstrated when the concept was viewed over time. Using the most frequently occurring attributes, antecedents, and consequences, a model case was identified that could serve as a useful model to generically illustrate the concept of nursing case management. Rodgers' framework appeared both philosophically and methodologically sound, and provided an orderly progression to follow in the analysis of this concept. Conceptual clarity of nursing case management, as determined through this analysis, has provided a basis for expanding the knowledge development of nursing by contributing needed information for future developments in case management, nursing curriculum, and outcome measures.

Acknowledgements

We would like to express our sincerest gratitude to our committee chair, Dr. Madeline T. Martin, for her enthusiastic support and expertise in mentoring the research process. We would also like to extend our thanks to our committee members, Drs. Linda L. Workman, Darlene Anderson, and Dianne M. Felblinger for their enthusiasm and support in conducting this study. Their expert knowledge gave us great guidance and insight into the concept analysis of nursing case management.

We would like to thank our family and friends for their love and support through this laborious research investigation. Our families have been our grounding force. Their patience has exceeded expectations by eating more than their fair share of take-out food, giving up computer time, and hearing the phrase "Mommy's doing her homework." "A special thank-you to Paul, who has been at my side every step of the way. Without you, I think the house would have fallen apart a long time ago. And a big fat hug for Mitchell, whose smile was always the silver lining in my day." - Kim. "Geoff gets a big thanks for all his computer help and picking up the slack with the house and kids, even while working nights! To the girls, Kristin, Erin, and Aimee, whose humor always kept things in perspective, yes, mommy is done with her thesis!" - Kay.

Table of Contents

| Abstract | ii |
|---|-----|
| Acknowledgement | iv |
| Table of Tables | vii |
| Chapter I: Introduction to the Study | 1 |
| Introduction | 1 |
| Purpose of the Study | |
| Need for the Study | |
| Review of the Literature | |
| | |
| Review of Previous Studies | |
| Theoretical Rationale | |
| Conceptual Definitions | |
| Summary | 11 |
| Chapter II: Methods and Procedures | 12 |
| Design of the Study | 12 |
| Setting | |
| Sample | |
| Operational Definitions | |
| Procedures | |
| Summary | |
| Chapter III: Presentation of Findings | 20 |
| Data Analysis | 20 |
| Demographics of the Sample | |
| Results | |
| | |
| Summary | 41 |
| Chapter IV: Discussion of Findings | 42 |
| Discussion | 42 |
| Temporal Changes and Cross-Disciplinary Comparisons | 47 |
| Model Case | 50 |
| Implications | 52 |
| Scope and Limitations | |
| Summary | 54 |

| Chapter V: Summary of the Study | 55 |
|--|-----|
| Purpose of the Study | 55 |
| Need for the Study | |
| Methods and Procedures | |
| Sample | |
| Data Collection and Analysis | |
| Findings and Conclusions | |
| Surrogate Terms | |
| Related Concepts | |
| References | |
| Antecedents | 60 |
| Attributes | |
| Consequences | 62 |
| Temporal Changes | |
| Model Case | 64 |
| Recommendations for Future Research | 65 |
| Bibliography | 67 |
| Appendix A: Data Collection Sheet for Surrogate Terms | 105 |
| Appendix B: Data Collection Sheet for Related Concepts | 106 |
| Appendix C: Data Collection Sheet for References | 107 |
| Appendix D: Data Collection Sheet for Antecedents | 108 |
| Appendix E: Data Collection Sheet for Attributes | 109 |
| Appendix F. Data Collection Sheet for Consequences | 110 |

Table of Tables

| Table 1. | Characteristics of Literature Population and Samples | 14 |
|----------|---|----|
| Table 2. | Interrater Reliability | 17 |
| Table 3. | Interrater Reliability of Major Categories | 19 |
| Table 4. | Frequency of Demographic Data by Discipline and Year for Sample | 21 |
| Table 5. | Frequency Distribution of Surrogate Terms | 22 |
| Table 6. | Frequency Distribution of Related Concepts | 24 |
| Table 7. | Frequency Distribution of References | 24 |
| Table 8. | Frequency Distribution of Antecedents | 26 |
| Table 9. | Frequency Distribution of Attributes | 28 |
| Table 10 | Frequency Distribution of Consequences | 31 |
| Table 11 | Top Ten Terms in each Major Category | 33 |
| Table 12 | Temporal Changes between 1987 to 1991 and 1992 to 1995 in Frequency | y |
| | Distribution of Top Ten Terms in Major Categories | 36 |

Chapter I

Introduction to the Study

This chapter consists of the introduction, the purpose of the study, the need for the study, the review of the literature, the theoretical rationale, and conceptual definitions.

The problem of defining nursing case management has been addressed using Beth Rodgers' concept analysis framework.

Introduction

Reform initiatives in health care delivery systems have stimulated an accelerated interest in case management. As health care costs have exponentially increased, all consumers of health care have demanded cost effective, quality patient care. To meet these demands, health care organizations have instituted case management as one method of service delivery. Case management, however, as a concept of practice had differed between and within many contexts and environments including: programs of insurance-based, employer-based, worker's compensation, or third party payers; and practices of nursing, medicine, mental-health, or social services (Smith, 1995). The operationalization of case management, as a complex concept in health care, has resulted in a lack of a single agreed upon definition. The difficulty in defining case management lies in the fact that it has several meanings (Molloy, 1994). Often, several terms are intermingled or interchanged with case management, such as: service management, care coordination, care management, patient care planning, and managed care. The lack of clarity has resulted in confusion for both the consumer and the healthcare providers delivering the service.

Purpose of the Study

In an attempt to produce a clearer understanding of nursing's role in case management, the purpose of this study was to clarify the concept of nursing case management. This clarification was undertaken based on a comprehensive review of how nursing case management was described and applied in the periodical literature.

Need for the Study

Many descriptions of case management exist. In fact, case management not only differs by purpose and activities, but also in definitions across settings, models, and between disciplines. These differences constituted the need for a closer look at case management and the application of the concept in nursing practice.

An examination of case management demonstrates that it has continued to grow in popularity across the spectrum of health care settings. Several trends in case management have necessitated the need for defining the boundaries of case management. This has been made apparent through the integration home-based and hospital-based case management practices. That is, care services have been expanded to follow clients beyond a single episode of illness. In addition, certification has started to be granted through the Commission on Insurance Rehabilitation Specialists for those individuals who hold a professional license or certification in a healthcare field with case management experience (Cline, 1993).

A common certification for several disciplines could further perpetuate duplication of services. The multiplicity of services and settings in which case management has been carried out has invariably lead to the numerous definitions of case management and case

managers. The question then arose as to who would be the most appropriate provider to serve as case manager for a given population (Marschke & Noan, 1993). According to Marschke and Noan, some common views are that nurses or physicians would be best to serve in the acute setting where there was an illness emphasis. Whereas, social workers have been described as the "best fit" for the community or ambulatory setting where there was a wellness emphasis. When a client is in contact with more than one case management service, this process further added to the confusion about who was responsible for their care. According to Smith (1995), case management had the flexibility to cross all disciplines to decrease this fragmentation of care. With the ability to function in multiple health care settings, nursing can easily adapt to meet multiple client needs.

The case manager's background influences the kind of direct care that can be provided to the client. Nurse case managers combine case management with direct nursing care, providing a more comprehensive assessment of health than other health professionals serving as case managers (Newman, Lamb, & Michaels, 1991). In order to really know the client's needs, the case manager should have a clinical background with substantial clinical knowledge, skills and judgment. A key role in nursing practice is the coordination of services and care, thus further supporting the nurse as an ideal candidate for case manager.

It should also be noted that nurses have been involved in case management in the public health arena since the turn of the century. In this role, the nurse focused on clients and their families in the management of their health promotion goals. However, according to Grau (1984), the term case management has evolved from the phrase "service"

coordinator" addressed in the social welfare literature during the early 1970's. Despite the earlier introduction of the term, as late as 1988 confusion about the term case management was perpetuated by the nursing professions' own confusion about the process and mislabeling of the concept (Lyon, 1988). However, a change in the focus of case management has been seen developing over recent years. The practice of case management has been directed at the medical focus of disease processes or the financial focus on cost containment. Despite these new focuses, the concept of case management and discipline specific roles have not clearly emerged. This has led to role confusion across disciplines and within the health care industry. Therefore, studies focusing on the clarification of the concept of nursing case management are needed.

Clarifying the description of nursing case management will facilitate the identification of purposes, services, and clients to be served. Mark (1992) identified case management, team nursing, and total patient care as major nursing practice models, however, she did not clarify nursing case management as a concept. Clarification will allow for greater ease in evaluation and comparison among sites or environments. Lyon (1993) stressed that it was unrealistic to continuously redefine the purpose or functions of a case management program every time the generally accepted trend in criteria for case management changes.

In order to prevent the fluctuating definitions of case management, the clarification of nursing case management through concept analysis may provide a knowledge base for nurses to function in the role of case managers. According to Chinn and Kramer (1991), a concept analysis has been described as a strategy for creating meaning. A concept is more than just the word or expression; it includes the accumulation of intent and use that

lies behind the word (Rodgers, 1993). The analysis process, as described by Goosen (1989), uses information about the designated concept from all published and experiential data available in numerous disciplines to incorporate empirical and descriptive knowledge.

Analysis of a concept has been plagued by conceptual problems such as vague terminology, ambiguity of definitions, and variances across theories, consequently slowing the advancement of scientific inquiry in those areas (Rodgers, 1993). Extensive amounts of literature connected with a concept may imply a well developed concept, but confusion could be revealed through closer inspection. When confusion has been found to exist, a clarification of the concept is in order (Morse, 1995). Lack of clarification in the meaning of words used to describe a concept has been shown to lead to misinterpretation and misunderstanding. Although agreement on the meaning of a particular term is not essential, a term must be described sufficiently so that the desired image of the concept becomes more explicit. Without defining concepts, nursing cannot evolve either as a science or as a professional practice.

Given that the nursing discipline is based on scientific principles, studies which are directed at the clarification of concepts and/or practices are needed. Therefore, a study directed as the clarification of nursing case management should have significant impact. Thus, finding from this study may contribute to a better base for nursing practice and provide information to assist the health care team in making decisions about case management issues.

Review of the Literature

Review of Previous Studies

Extensive literature exists in which the nurse has been described in the role of case manager. In addition, the nurse as a case manager has been supported by the American Nurses Association (ANA). The primary role functions of the nurse case manager have been further defined by the ANA (1988) as: health assessment and planning, procurement, delivery, coordination, and monitoring to meet the multiple needs of the client. Despite the volume of literature available on nursing case management, an extensive literature search had not produced a previous concept analysis of nursing case management.

The literature used in this investigation of a concept analysis of nursing case management was compiled during the process of data collection. This information can be found in the presentation and discussion of findings, in Chapter III and IV.

Theoretical Rationale

Developing and clarifying the knowledge base of nursing has been a concern of the discipline. However, concept development and clarification had not been well developed in nursing. Beth Rodgers, (1989) developed a framework for interpreting the findings of a concept analysis. This theoretical rationale is addressed as Rodgers described this concept analysis framework. Concepts are considered to be dynamic and possess practical usage in this "evolutionary" view. According to this approach, concepts are formed by identifying characteristics common to a phenomena, condensing, and clustering these characteristics, along with some means of expression, usually a word. The social context in which the interaction and development of the concept occur influence its evolvement.

Evolution or conceptual change is an important aspect of this view of concepts. Rodgers believed that attributes of a concept may change over time and still maintain usefulness and relevance.

According to Rodger's (1993) framework, the development of a concept can be illustrated by a cycle that continues through time and within a certain context or a particular discipline. The three distinct influences on concept development described in this cycle are: significance, use, and application. The significance of the concept reflects its relevance and purpose and is related to a variety of factors at any given time. The second influence, use, as a common manner of employing that concept, is an appropriate focus in the definition of a concept. Application comes as education and socialization over time give the concept a particular use. Strengths and limitations of the application give direction for further development of the concept.

This framework emphasizes the ongoing process of concept development. An inductive approach is used so that a specific or strict definition is not the outcome. The emphasis on time and context correlate with the goal. Concept analysis by this evolutionary method has been defined as the following eight step process:

- 1. Identify the concept of interest and alternate terms.
- 2. Identify and select a suitable setting and sample for data collection.
- Collect data about surrogate terms, references, antecedents, consequences, and attributes of the concept.
- 4. Identify related concepts of the concept of interest.
- 5. Analyze data obtained from the above characteristics of the concept.

- 6. Conduct temporal and/or interdisciplinary comparisons of the concept.
- 7. If pertinent, identify a model case of the concept.
- 8. Identify implications and recommendations for further study.

Identifying the concept of interest and appropriate nomenclature is the first step in this analysis of a concept. The particular direction of the study is derived in this step.

Directions the researcher chooses may include changes in the concept over time, the use over various disciplines, or to expand the cache of concepts used to characterize situations or research.

In the second step, the desired outcomes and initial questions asked by the researcher will determine the setting and sample best suited to the particular concept of interest. The setting, defined in a literature-based analysis as the time period to be examined and disciplines to be included, is selected by familiarity with the literature. Large volumes of literature can be reduced to a manageable size by limiting time periods, disciplines, or literature sources. The sample, which is the literature included in the study, accommodates a computerized search. This is a distinct advantage because it makes it possible to identify the total indexed population of literature.

After selecting the sample, the collection of raw data and subsequent analysis are the focus of using this framework of concept analysis. The third and fourth steps are where the identified surrogate terms, related concepts, references, antecedents, attributes, and consequences provide relevant data that actually clarify the concept, rather than a specific dictionary definition. Articles reviewed in the analysis may not actually define the concept; the researcher may have to look for clues on the author's definition. The

researcher also collects data in the form of methodological decisions made during the span of the investigation.

Step 5 is analysis of the data. The greatest challenge in concept analysis is avoiding premature closure and jumping to conclusions. For this reason, Rodgers (1993) stressed that the final, formal analysis should be delayed until near the end of data collection.

According to Rodgers, it is important for researchers avoid forming early impressions and subsequently missing characteristics of the data that appear during the collection. The data are organized according to the major themes occurring in the literature. This is a process of continually reorganizing the data to obtain appropriate categories or headings. Step 6 is directed at the examination of the delineated categories, then proceeds to observe for changes in the use of the concept over time, its use among various disciplines, or emerging trends.

In the seventh step, the inductive view of the evolutionary method dictates that the model case be identified; not constructed by the researcher as other methods of concept analysis advocate. According to Rodgers (1993), the construction of a model case when one is not available may actually imply a clear definition of the concept when in reality the absence of a model case is an important piece of information about the concept under study. A model case is used to provide a relevant, effective application of the concept in a variety of settings. It is important for the investigator to remain neutral in the choice of a model case since bias could easily arise at this time.

Interpretation follows the identification of a model case. Two outcomes of interpretation are desirable in the analysis of a concept: providing information on the

current state of the concept, and initiating indications for inquiry based on this information and identified gaps. In this framework, the results of the investigation may be viewed in comparisons between disciplines or changes over time, as well as insight into trends concerning the concept. The inductive nature of this framework is believed to promote analysis of a concept as an indication for further research, not a conclusive end to examination.

The eighth and final step, promoting additional inquiry by identifying questions and areas for further research, is an important contribution of an analysis of a concept. A concept analysis can strengthen research by originating hypotheses or providing a solid conceptual foundation for further study. Methodical review of a large volume of literature is possible with concept analysis, and consequently can attest to the need for a particular study.

This framework emphasizes the fluid nature of concepts relative to temporal and contextual aspects. It offers nursing an avenue to continue to develop and clarify its' knowledge base and conceptual foundation.

Conceptual Definitions

This descriptive study was based on Beth Rodger's Concept Analysis Framework. In this framework, the characteristics of a concept are divided into the major categories of surrogate terms, related concepts, references, antecedents, attributes, and consequences. The major categories and the terms concept and model case, according to Rodgers' (1993) are defined as follows:

<u>Antecedents</u>: refer to situations, events, or phenomena that precede an example of the concept.

Attributes: constitute a real definition as opposed to a nominal definition that merely substitutes one synonymous expression for another.

Concept: abstractions that are expressed in some form.

<u>Consequences</u>: situations, events, or phenomena that follow an example of the concept.

Model case: an everyday example of the concept that includes its attributes.

References: a situation in which the concept occurs or is being applied.

Related concepts: those concepts that do not share the same attributes with the concept under study, yet are connected to that concept.

Summary

Chapter I provided the introduction, the purpose of the study, the need for the study, the review of the literature, the theoretical framework, and conceptual definitions. The complexity of case management was linked to the variety of definitions and descriptions that have evolved over time. Since the term case management has been used by many disciplines to describe care practices in diverse settings, the need for a concept clarification specific to nursing case management was identified. Concept analysis, as a strategy for creating meaning, was chosen to aide in the description of nursing case management.

Beth Rodgers' eight step concept analysis was chosen as the framework for use in this study.

Chapter II

Methods and Procedures

This chapter is comprised of sections that describe the research design, setting, sampling, operational definitions, and procedures. In accordance to Rodgers' (1993) framework, steps 1 through 4 are addressed.

Design of the Study

A retrospective descriptive study which incorporated a concept analysis method was used for this investigation. The method of concept analysis described by Rodgers (1993) was applied to literature of professional health care disciplines which addressed a nurse in the role of case manager. This approach was consistent with the idea that interrelationships exist across various disciplines.

Setting

Rodgers (1993) defined the setting as a literature-based analysis composed of the time period and types of literature to be reviewed. The population for this investigation included all English language journal articles published in the disciplines of nursing, medicine, psychology, and sociology from 1983 to June 1995 that dealt with case management or managed care. The inclusion of the three disciplines in conjunction with nursing was based on an initial examination of the literature.

Upon a preliminary search, a vast majority of the times the concept of case management was noted, it was found in the nursing literature. Therefore, CINAHL was used as a primary source for identifying the concept of nursing case management. The indexes in Social Index, Medline, and PsychINFO were also included to add another

perspective because of the close relationship between the conceptualizations in these other disciplines and nursing. The index Medline did not have the keyword "case management," however, case management-related articles were filed under the keyword "managed care." All indexes were searched using the keyword "case management" and "managed care." Identifying the concept of interest and the alternate term fulfilled step 1 of Rodgers' (1993) framework. The selection of the setting and sample was in line with the second step.

Sample

Articles were considered for inclusion in the investigation if they met the following criteria: (a) were found in medical, nursing, psychology, and sociology journals, (b) were accessible for examination, and (c) pertained to nursing case management. Articles were excluded if their main focus did not pertain to the nurse in the role of case manager.

Articles were also excluded on the basis of duplication. Computer searches were employed to aid in the selection of the sample. The computer data bases were also cross-referenced to eliminate duplication of items that were listed in more than one index.

The results of the primary, secondary, and tertiary sampling techniques that were performed were identified in Table 1. The computerized literature search revealed 4,362 articles in the population. The primary sampling involved examining those abstracts on the computer for inclusion in the sample. This sampling resulted in the selection of 2,207 articles. The secondary sampling consisted of retrieving and reviewing the articles selected from the primary sample. This review was unable to be performed on 39 articles (1.8%) due to their inaccessibility. Exclusion criteria eliminated articles in the years 1983

through 1986. This secondary sampling process resulted in the selection, photocopying, and reviewing of 463 articles. In a tertiary sampling process, the inclusion criteria was then applied to those articles. This resulted in 351 articles being selected as the sample for use in this investigation.

Table 1
Characteristics of Literature Population and Sample

| | No. of articles | No. of articles | No. of articles | No. of articles | No. of articles |
|-------|----------------------------|-------------------------|-----------------|-----------------------|-----------------|
| Year | in population ^a | selected from | unavailable | photocopied | in sample |
| | | population ^b | for review | and read ^c | |
| 1995 | 175 | 43 | 2 | 8 | 7 |
| 1994 | 1186 | 417 | 16 | 107 | 79 |
| 1993 | .999 | 443 | 5 | 77 | 56 |
| 1992 | 593 | 435 | 10 | 58 | 45 |
| 1991 | 436 | 267 | 5 | 84 | 65 |
| 1990 | 524 | 356 | 0 | 58 | 43 |
| 1989 | 200 | 103 | 1 | 44 | 37 |
| 1988 | 139 | 63 | 0 | 25 | 18 |
| 1987 | 49 | 28 | 0 | 2 | 1 |
| 1986 | 28 | 26 | 0 | 0 | 0 |
| 1985 | 16 | 13 | 0 | 0 | 0 |
| 1984 | 13 | 11 | 0 | 0 | 0 |
| 1983 | 4 | 2 | 0 | 0 | 0 |
| Total | 4362 | 2207 | 39 | 463 | 351 |

^aPrimary sampling performed on these articles. ^bSecondary sampling performed on these articles. ^cTertiary sampling performed on these articles.

Operational Definitions

The conceptual definitions of Beth Rodgers' major categories of surrogate terms, related concepts, references, antecedents, attributes, and consequences were further described in order to make them more measurable. For the purpose of this study, the major categories and the term nursing case manager were operationally defined as follows:

Antecedents: causes or catalysts to the development or need of nursing case management.

Attributes: qualities, procedures, provider, and processes ascribed to nursing case management.

<u>Consequences</u>: situations, circumstances, or events that result in response to nursing case management.

Nursing case manager: a role ascribed to a nurse.

References: the population and physical setting in which the concept occurs or is being applied. For example, pediatrics/cardiac and home/hospital/clinic.

Related concepts: concepts that were linked with nursing case management yet not equated with it.

<u>Surrogate terms</u>: a term used interchangeably with nursing case management.

Procedures

In the tertiary sampling, each of the 463 articles were randomly selected and read.

Based on the established criteria, 112 articles were excluded and 351 articles were included in the sample. As an article was included in the sample, it was assigned identification codes. This identification code provided annotation, numbered specific to the article, the discipline, and the year published. Articles were randomly ordered and

assigned a number of 1 through 351. Disciplines were noted using a number 1 through 5. This was followed by a double digit number representing the year of publication.

According to Rodgers (1993), this identification system provided the following benefits:

(a) ease in noting a source when collecting data; (b) ability to differentiate among various disciplines; (c) and aide in cross-referencing between each item and the original population list.

Twenty articles from the sample were randomly selected for interrater reliability. Each article was read in its entirety to aid in the identification of the general content and tone of each of the articles. Statements were identified that focused on the following major categories described in step 3 and 4 of Rodgers' (1993) framework: surrogate terms, related concepts, references, antecedents, attributes and consequences. Statements and phrases were inductively grouped into these categories. Data terms in the form of one word or a few word phrases were derived from the content of each article for each major category. As suggested by Rodgers (1993), related concepts and surrogate terms were excluded from this procedure because they needed no further reduction from the simple one or two word bits of data.

These data were recorded onto coding sheets developed by the researchers to facilitate analysis and reduce transcription errors (see Appendixes A-F for data collection sheets). Separate data collection sheets were used to record data specific to each of the six major categories of surrogate terms, references, antecedents, attributes, consequences, and related concepts.

After the first twenty articles were read by one researcher, the same articles were read a second time by the other researcher. Noted discrepancies between findings of researchers were discussed and a consensus was reached on the data. These twenty articles were then returned to the sample pool. A second set of twenty articles was read by both researchers and was subjected to a percent agreement formula for interrater reliability. The percent agreement formula is number of agreements/number of agreements plus disagreements (Polit & Hungler, 1995). According to Polit & Hungler, this reliability, as a function of agreements, tends to overestimate observer agreements. This formula was selected because the data were exhibited as nominal data. Article number 10 was excluded by both investigators. Interrater reliability was performed on the remaining 19 articles. As shown in Table 2, the interrater reliability was 0.922.

Table 2

Interrater Reliability

| Article | Total possible agreements | Number of agreements | Number of disagreements | Interrater reliability |
|---------|---------------------------|----------------------|-------------------------|---------------------------|
| | | | | |
| 1 | 133 | 118 | 15 | .887 |
| 2 | 133 | 128 | 5 | .962 |
| 3 | 133 | 119 | 14 | .894 |
| 4 | 133 | 119 | 14 | .894 |
| 5 | 133 | 123 | 10 | .925 |
| 6 | 133 | 118 | 15 | .887 |
| 7 | 133 | 121 | 12 | .910 |
| . 8 | 133 | 126 | 7 | .947 |
| 9 | 133 | 120 | 13 | .902 |
| | | | | (table continu |

(table continues)

Table 2. (continued)

| Article | Total possible | Number of | Number of | Interrater |
|---------|----------------|------------|---------------|-------------|
| | agreements | agreements | disagreements | reliability |
| 10 | NA | NA | NA | NA |
| 11 | 133 | 116 | 17 | .872 |
| 12 | 133 | 132 | 1 | .992 |
| 13 | 133 | 119 | 14 | .895 |
| 14 | 133 | 127 | 6 | .954 |
| 15 | 133 | 126 | 7 | .947 |
| 16 | 133 | 130 | 3 | .977 |
| 17 | 133 | 126 | 7 | .947 |
| 18 | 133 | 114 | 19 | .857 |
| 19 | 133 | 124 | 9 | .932 |
| 20 | 133 | 126 | 7 | .947 |
| Total | 2527 | 2332 | 195 | .922 |

The percent agreement formula was applied to the data sets for each major category to examine interrater reliability within each major category. This interrater reliability is shown in Table 3. The range of reliability was from 0.889 for attributes to 0.957 for references.

After completion of interrater reliability, the terms that were noted from the articles were generated into a list under each major category. Each term was assigned a number as it was added to the list for each major category. These lists were then used by both researchers to aid in the identification of terms for each major category found in the remaining articles of the sample. As more terms under the major categories were identified by the investigators, they were added to the lists for use by each investigator.

In addition to the investigation data, another type of data was collected. Each researcher maintained a journal throughout the investigation. Thoughts and perceptions about data collection, analysis, and methodological decisions were noted in these journals.

Table 3

Interrater Reliability of Major Categories

| Major category | Total possible agreements | Number of agreements | Number of disagreements | Interrater reliability |
|-------------------|---------------------------|----------------------|-------------------------|---------------------------|
| Surrogate | | | | |
| Terms | 76 | 71 | 5 | .934 |
| References | 339 | 382 | 17 | .957 |
| Antecedents | 437 | 415 | 22 | .950 |
| Attributes | 988 | 872 | 110 | .889 |
| Consequences | 589 | 551 | 38 | .935 |
| Related | 38 | 35 | 3 | .921 |
| Concepts | | | | |
| Total | 2527 | 2332 | 195 | .931 |

Summary

In summary, Chapter II provided the methodologic base for the investigation. The chapter covered the research design, setting, sampling, operational definitions, and procedures. A retrospective literature review, according to Rodgers' (1993) framework for concept analysis was performed, using a computer-based literature search. This covered nursing, medicine, psychology, and sociology journals. A primary, secondary, and tertiary sampling was then carried out according to the criteria for inclusion into the sample. Data were collected on the sample following an interrater reliability between investigators.

Chapter III

Presentation of Findings

Chapter III consisted of the data analysis, demographic data of the sampled articles, and results of the investigation. This chapter covered steps 5 and 6 of Rodgers' (1993) framework. Data was presented in the order of surrogate terms, related concepts, references, antecedents, attributes, and consequences.

Data Analysis

Descriptive analysis was performed to profile the demographics of the sample, the major categories, and the ten most frequent terms per major category that occurred.

Temporal changes in the ten most frequent terms were examined. Frequency distribution allowed nominal data to be organized and tabulated. A frequency distribution analysis of all data sets was used to present the findings.

Demographics of the Sample

Demographic data on this sample of 351 articles were categorized and presented in Table 4. The discipline characteristics of the sample consisted of 318 (90.6%) nursing, five (1.4%) medicine, eight (2.3%) psychology, six (1.7%) sociology, and 14 (4%) other discipline articles. Articles classified into the category of other disciplines consisted of five insurance, one health administration, one business, two education, one occupational therapy, and four unknown discipline articles. The largest number of articles (n=79) came from the year 1994, accounting for 22.5% of the sample.

Table 4

Frequency of Demographic Data by Discipline and Year for Sample (N=351)

| | Frequency | Frequency % |
|------------|-----------|-------------|
| Discipline | | |
| Nursing | 318 | 90.6 |
| Medicine | 5 | 1.4 |
| Psychology | 8 | 2.3 |
| Sociology | 6 | 1.7 |
| Other | 14 | 4.0 |
| Year | | |
| 1995 | 7 | 2.0 |
| 1994 | 79 | 22.5 |
| 1993 | 56 | 16.0 |
| 1992 | 45 | 12.8 |
| 1991 | 65 | 18.5 |
| 1990 | 43 | 12.3 |
| 1989 | 37 | 10.5 |
| 1988 | 18 | 5.1 |
| 1987 | 1 | 0.3 |

Results

The purpose of this study was to clarify the concept of nursing case management. This phase of the investigation fell in line with step 5 of Rodgers' (1993) framework.

Descriptive statistics were utilized to analyze the data collected on surrogate terms, related concepts, references, antecedents, attributes, and consequences of nursing case management. The frequency distribution and percentage for the six major categories

were presented in Tables 5 through 10. In the tables, all terms in each major category were listed in rank order from most frequent to least frequent occurrence. Each term was also represented by the percentage of the total number of term occurrences per major category.

The 23 identified surrogate terms in this study were presented in Table 5. Surrogate terms were addressed a total of 65 times in the literature. Care management was the most frequent term, occurring 17 times. Only four terms; care management, managed care, case coordination, and collaborative care were seen more than two times.

Table 5
Frequency Distribution of Surrogate Terms

| Term | Frequency(f) | Percentage(%) |
|------------------------------|--------------|---------------|
| care management | 17 | 26.2 |
| managed care | 10 | 15.4 |
| case coordination | 8 | 12.3 |
| care coordination | 6 | 9.2 |
| outcomes management | 2 | 3.1 |
| continuing care coordination | 2 | 3.1 |
| service integration | 2 | 3.1 |
| service coordination | 2 | 3.1 |
| continuity coordination | 2 | 3.1 |
| clinical case manager | 2 | 3.1 |
| managed competition | 1 | 1.5 |
| health plan coordinator | 1 | 1.5 |
| program coordinator | 1 | 1.5 |
| collaborative care | 1 | 1.5 |
| intensive case management | 1 | 1.5 |

(table continues)

Table 5. (continued)

| Term | Frequency(f) | Percentage(%) |
|------------------------|--------------|---------------|
| cost management | 1 | 1.5 |
| utilization management | 1 | 1.5 |
| resource coordination | 1 | 1.5 |
| health care management | 1 | 1.5 |
| case assignment | 1 | 1.5 |
| team managed case | | |
| management | 1 | 1.5 |
| discharge planner | 1 | 1.5 |
| total frequency | n=65=∑f | Σ%=100% |

As seen in Table 6, four of the surrogate terms were also identified in the sampled literature as related concepts. Those terms were managed care, outcomes management, utilization review, and discharge planning. Managed care was the most frequent related concept, whereas it was the second most frequent surrogate term found in the sampled literature.

The third major category, references, was presented in Table 7. A total of 39 references were observed in the sampled literature. Home care and hospital settings were noted most often at frequencies of 124 and 114, respectively.

Table 8 denotes the same similarity in frequency in the two most frequently found antecedents. Out of a total of 31 antecedents, increased costs were noted 102 times, compared to multiple and complex needs requiring an integrated approach at 99 times.

Table 6

Frequency Distribution of Related Concepts

| Term | Frequency (f) | Percentage(%) |
|------------------------|---------------|---------------|
| managed care | 62 | 60.8 |
| gate keeper | 26 | 25.5 |
| facilitator | 5 | 4.9 |
| outcome management | 4 | 3.9 |
| geriatric consultation | 1 | 1.0 |
| utilization review | 1 | 1.0 |
| preadmission screening | 1 | 1.0 |
| discharge planning | 1 | 1.0 |
| social casework | 1 | 1.0 |
| total frequency | n=102=∑f | Σ%=100% |

Table 7

Frequency Distribution of References

| Term | Frequency(f) | Percentage(%) |
|-------------------|--------------|---------------|
| home care | 124 | 19.0 |
| hospital | 114 | 17.5 |
| medical center | 70 | 10.7 |
| elderly | 42 | 6.4 |
| mentally ill | 31 | 4.7 |
| pediatric | 29 | 4.4 |
| outpatient clinic | 22 | 3.4 |

(table continues)

Table 7. (continued)

| Term | Frequency(f) | Percentage(%) |
|--------------------------|--------------|---------------|
| surgery | 21 | 3.2 |
| HIV | 17 | 2.6 |
| inner city | 16 | 2.5 |
| computer | 14 | 2.1 |
| rehab | . 13 | 2.0 |
| adult ICU | 12 | 1.8 |
| rural | 12 | 1.8 |
| NICU | 11 | 1.7 |
| cardiovascular | 11 | 1.7 |
| HMO/insurance | 10 | 1.5 |
| orthopedics | 10 | 1.5 |
| perinatal/women's health | 10 | 1.5 |
| occupational health | 8 | 1.2 |
| long-term facility | 6 | 0.9 |
| school | 6 | 0.9 |
| cancer | 6 | 0.9 |
| neonates | 6 | 0.9 |
| trauma center | 5 | 0.8 |
| learning disability | 5 | 0.8 |
| hospice | 4 | 0.6 |
| urology | 3 | 0.5 |
| diabetes | 3 | 0.5 |
| transplant | 2 | 0.3 |
| neuroscience | 2 | 0.3 |
| lawsuit pending | 1 | 0.2 |
| pulmonary | 1 | 0.2 |
| total frequency | n=653=∑f | Σ%=100% |

Table 8

Frequency Distribution of Antecedents

| Term | Frequency(f) | Percentage(%) |
|------------------------------------|--------------|---------------|
| increased costs | 108 | 14.9 |
| multiple/complex needs require | | |
| integrated approach | 99 | 13.7 |
| fragmentation of care | 69 | 9.5 |
| DRG prospective payment | | |
| system | 67 | 9.3 |
| nursing shortage | 41 | 5.7 |
| increased quality needs | 40 | 5.5 |
| health care reform | 38 | 5.3 |
| difficult access to services | 38 | 5.3 |
| long-term clients | 38 | 5.3 |
| LOS decrease needs | 30 | 4.1 |
| changing roles of health | | |
| professionals | 19 | 2.6 |
| need improved education | 13 | 1.8 |
| duplication of services | 13 | 1.8 |
| efficiency needs | 12 | 1.7 |
| confusion in care | 11 | 1.5 |
| pt unprepared for timely | | |
| discharge | 10 | 1.4 |
| inconsistency in care | 10 | 1.4 |
| interest in pt/family satisfaction | 9 | 1.2 |
| advocate needed | 7 | 1.0 |
| rehospitalization | 7 | 1.0 |

(table continues)

Table 8. (continued)

| Term | Frequency(f) | Percentage(%) |
|------------------------------------|--------------|---------------|
| duplication of | | |
| equipment/supplies | 6 | 0.8 |
| decreased resources | 6 | 0.8 |
| JCAHO recommendations of | | |
| multidisciplinary care | 5 | 0.7 |
| increased acuity | 5 | 0.7 |
| decreased number of health care | | |
| providers | 5 | 0.7 |
| patient participation desired | 4 | 0.6 |
| limited collaboration | 4 | 0.6 |
| system failure in managed care | | |
| contracts | 3 | 0.4 |
| managed care contracts | 3 | 0.4 |
| interest in caregiver satisfaction | 2 | 0.3 |
| demand for accountability | 1 | 0.1 |
| total frequency | n=723=∑f | Σ%=100% |

The next major category, attributes, were presented in Table 9. This table demonstrated the highest number of terms collected. The sampled literature reflected a total of 65 different attributes. Attribute terms were noted in the sampled literature a total of 3466 times. "Interdisciplinary collaboration" was the phrase that was observed the most frequently - 226 times.

Second only to attributes, consequence terms were found in the sampled literature 908 times. Table 10 addressed this last major category, listing the 36 consequences noted. "Decreased costs" was the most frequent consequence, observed 134 times.

Table 9

Frequency Distribution of Attributes

| Term | Frequency(f) | Percentage(%) |
|----------------------------------|--------------|---------------|
| interdisciplinary collaboration | 226 | 6.5 |
| develops plan of care | 205 | 5.9 |
| comprehensive assessment | 175 | 5.0 |
| coordinates services | 153 | 4.4 |
| frequent evaluation of progress | 147 | 4.2 |
| monitors delivery of care | 132 | 3.8 |
| coordinates care for specific | | |
| population | 114 | 3.3 |
| critical pathway use | 110 | 3.2 |
| educates pt/family | 97 | 2.8 |
| coordinates D/C planning | 93 | 2.7 |
| communication channels | 90 | 2.6 |
| pt/family involved in goal | | |
| setting/evaluation | 83 | 2.4 |
| pt advocacy | 82 | 2.4 |
| makes referrals | 75 | 2.2 |
| collaboration with pt/family | 74 | 2.1 |
| performing case- | | |
| finding/eligibility/screening | 67 | 1.9 |
| evaluates and monitors costs | 65 | 1.9 |
| implementing | 64 | 1.8 |
| evaluates and monitors resources | 63 | 1.8 |
| documenting | 63 | 1.8 |

Table 9. (continued)

| Term | Frequency(f) | Percentage(%) |
|---|--------------|---------------|
| transcends care settings | 63 | 1.8 |
| tracks/analyzes critical path variances | 59 | 1.7 |
| relationship with client | 58 | 1.7 |
| accountability | 57 | 1.6 |
| CNS as CM | 52 | 1.5 |
| quality improvement | 50 . | 1.4 |
| episode-based care | 50 | 1.4 |
| clinical outcomes achieved in | | |
| prescribed time-frame | 48 | 1.4 |
| offers clinical support/expertise | 47 | 1.4 |
| facilitates access to health care | 47 | 1.4 |
| caregiver as CM | 43 | 1.2 |
| social worker as CM | 41 | 1.2 |
| assess formal/informal support | 37 | 1.1 |
| system | | |
| educates staff | 35 | 1.0 |
| analysis of pt financial data | 33 | 1.0 |
| coordinates consults | 33 | 1.0 |
| intervenes in delivery of care | 33 | 1.0 |
| providing direct pt care when | | |
| necessary | 32 | 0.9 |
| counseling | 31 | 0.9 |
| promotes self-care | 31 | 0.9 |
| assess biopsychosocial needs | 30 | 0.9 |
| | | (table conti |

Table 9. (continued)

| Term | Frequency(f) | Percentage(%) |
|---------------------------------------|--------------|---------------|
| authorizes hospitalization/rehab/home | | |
| needs | 30 | 0.9 |
| provides/revises standards of care | 30 | 0.9 |
| coordinates team/family meetings | 29 | 0.8 |
| provides follow-up care | 28 | 0.8 |
| long-term perspective | 25 | 0.7 |
| NP as CM | 23 | 0.7 |
| pt liaison | 21 | 0.6 |
| analysis of clinical data | 20 | 0.6 |
| research | 19 | 0.5 |
| flexibility | 19 | 0.5 |
| coordinates interdisciplinary rounds | 17 | 0.5 |
| assess self-care abilities | 17 | 0.5 |
| health promotion/prevention | 17 | 0.5 |
| prevents fragmentation | 15 | 0.4 |
| assess pt coping/adaptive abilities | 14 | 0.4 |
| negotiator | 13 | 0.4 |
| delegates | 12 | 0.3 |
| other health care providers as CM | 8 | 0.2 |
| consistent caregivers | 7 | 0.2 |
| empowering | 7 | 0.2 |
| supervise | 3 | 0.1 |
| marketing | 2 | 0.1 |
| entrepreneur | 1 | 0.01 |
| risk management | 1 | 0.01 |
| total frequency | n=3466=∑f | Σ%=100% |

Table 10

Frequency Distribution of Consequences

| increased involvement/ responsibility of family 31 3.4 decreased readmission 30 3.3 enhanced QOL 30 3.3 facilitated provision of services/access 24 2.6 decreased duplication of services 21 2.3 | Term | Frequency(f) | Percentage(%) |
|--|------------------------------------|--------------|---------------|
| improved quality of care/QA increased staff satisfaction 62 68 increased pt satisfaction 60 66 decreased fragmentation of care 60 improved pt outcomes 60 increased efficiency 60 40 4.4 standardization of care/continuity 61 of services 63 64.0 increased collaboration 63 63 64.0 increased involvement/ 63 65 66 68 68 68 68 68 68 68 68 68 68 68 68 | decreased costs | 134 | 14.8 |
| increased staff satisfaction 62 6.8 increased pt satisfaction 60 6.6 decreased fragmentation of care 46 5.1 improved pt outcomes 45 5.0 increased efficiency 40 4.4 standardization of care/continuity of services 36 4.0 increased collaboration 35 3.9 increased involvement/ responsibility of family 31 3.4 decreased readmission 30 3.3 enhanced QOL 30 3.3 facilitated provision of services/access 24 2.6 decreased duplication of services 21 2.3 timely treatment 20 2.2 optimize pt self-care 19 2.1 quality personnel more easily obtained/retained 16 1.8 decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | decreased LOS | 86 | 9.5 |
| increased pt satisfaction 60 6.6 decreased fragmentation of care 46 5.1 improved pt outcomes 45 5.0 increased efficiency 40 4.4 standardization of care/continuity of services 36 4.0 increased collaboration 35 3.9 increased involvement/ responsibility of family 31 3.4 decreased readmission 30 3.3 enhanced QOL 30 3.3 facilitated provision of services 24 2.6 decreased duplication of services 21 2.3 timely treatment 20 2.2 optimize pt self-care 19 2.1 quality personnel more easily obtained/retained 16 1.8 decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | improved quality of care/QA | 75 | 8.3 |
| decreased fragmentation of care improved pt outcomes increased efficiency standardization of care/continuity of services increased collaboration increased involvement/ responsibility of family decreased readmission enhanced QOL facilitated provision of services/access 24 2.6 decreased duplication of services 21 2.3 timely treatment optimize pt self-care quality personnel more easily obtained/retained decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | increased staff satisfaction | 62 | 6.8 |
| improved pt outcomes increased efficiency increased efficiency of services increased collaboration increased involvement/ responsibility of family decreased readmission enhanced QOL facilitated provision of services/access decreased duplication of services timely treatment optimize pt self-care quality personnel more easily obtained/retained decreased supply use facilitate use of nursing process 10 40 4.4 4.4 4.4 4.4 4.4 4.5 4.0 4.0 | increased pt satisfaction | 60 | 6.6 |
| increased efficiency standardization of care/continuity of services 36 increased collaboration 35 3.9 increased involvement/ responsibility of family decreased readmission enhanced QOL facilitated provision of services/access 24 2.6 decreased duplication of services 21 2.3 timely treatment 20 2.2 optimize pt self-care quality personnel more easily obtained/retained decreased supply use 11 1.2 facilitate use of nursing process 10 1.4 | decreased fragmentation of care | 46 | 5.1 |
| standardization of care/continuity of services 36 increased collaboration 35 3.9 increased involvement/ responsibility of family 31 3.4 decreased readmission 30 3.3 enhanced QOL 30 facilitated provision of services/access 24 2.6 decreased duplication of services 21 2.3 timely treatment 20 2.2 optimize pt self-care quality personnel more easily obtained/retained decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | improved pt outcomes | 45 | 5.0 |
| of services increased collaboration increased involvement/ responsibility of family decreased readmission enhanced QOL facilitated provision of services/access decreased duplication of services timely treatment optimize pt self-care quality personnel more easily obtained/retained decreased supply use facilitate use of nursing process 36 4.0 3.9 3.9 3.4 3.4 3.4 3.5 3.7 3.8 3.9 3.9 3.9 3.9 3.9 3.9 3.9 | increased efficiency | 40 | 4.4 |
| increased collaboration increased involvement/ responsibility of family decreased readmission enhanced QOL facilitated provision of services/access decreased duplication of services timely treatment 20 2.2 optimize pt self-care quality personnel more easily obtained/retained decreased supply use facilitate use of nursing process 10 3.9 3.9 3.9 3.9 3.9 3.9 3.9 3.9 3.9 3.9 | standardization of care/continuity | | |
| increased involvement/ responsibility of family 31 3.4 decreased readmission 30 3.3 enhanced QOL 30 3.3 facilitated provision of services/access 24 2.6 decreased duplication of services 21 2.3 timely treatment 20 2.2 optimize pt self-care 19 2.1 quality personnel more easily obtained/retained 16 1.8 decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | of services | 36 | 4.0 |
| responsibility of family decreased readmission and and and and and and and a | increased collaboration | 35 | 3.9 |
| decreased readmission 30 3.3 enhanced QOL 30 3.3 facilitated provision of services/access 24 2.6 decreased duplication of services 21 2.3 timely treatment 20 2.2 optimize pt self-care 19 2.1 quality personnel more easily obtained/retained 16 1.8 decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | increased involvement/ | | |
| enhanced QOL facilitated provision of services/access 24 2.6 decreased duplication of services 21 2.3 timely treatment 20 2.2 optimize pt self-care quality personnel more easily obtained/retained decreased supply use 11 1.2 facilitate use of nursing process 10 3.3 3.3 3.3 3.3 4.4 2.6 4.2 5.6 4.8 4.8 5.8 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 | responsibility of family | 31 | 3.4 |
| facilitated provision of services/access 24 2.6 decreased duplication of services 21 2.3 timely treatment 20 2.2 optimize pt self-care 19 2.1 quality personnel more easily obtained/retained 16 1.8 decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | decreased readmission | 30 | 3.3 |
| services/access 24 2.6 decreased duplication of services 21 2.3 timely treatment 20 2.2 optimize pt self-care 19 2.1 quality personnel more easily obtained/retained 16 1.8 decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | enhanced QOL | 30 | 3.3 |
| decreased duplication of services timely treatment 20 2.2 optimize pt self-care quality personnel more easily obtained/retained 16 1.8 decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | facilitated provision of | | |
| timely treatment 20 2.2 optimize pt self-care 19 2.1 quality personnel more easily obtained/retained 16 1.8 decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | services/access | 24 | 2.6 |
| optimize pt self-care 19 2.1 quality personnel more easily obtained/retained 16 1.8 decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | decreased duplication of services | 21 | 2.3 |
| quality personnel more easily obtained/retained 16 1.8 decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | timely treatment | 20 | 2.2 |
| obtained/retained 16 1.8 decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | optimize pt self-care | 19 | 2.1 |
| decreased supply use 11 1.2 facilitate use of nursing process 10 1.1 | quality personnel more easily | | |
| facilitate use of nursing process 10 1.1 | obtained/retained | 16 | 1.8 |
| | decreased supply use | 11 | 1.2 |
| decreased delays 10 1.1 | facilitate use of nursing process | 10 | 1.1 |
| | decreased delays | 10 | 1.1 |

Table 10. (continued)

| Term | Frequency(f) | Percentage(%) |
|-----------------------------------|--------------|---------------|
| 3rd party payers pleased | 8 | 0.9 |
| administrators pleased | 7 | 0.8 |
| decreased diagnostic test use | 7 | 0.8 |
| caregivers have clear practice | | |
| pattern to follow | 7 | 0.8 |
| decreased duplication of services | 6 | 0.7 |
| increased communication | 5 | 0.6 |
| fast recovery | 4 | 0.4 |
| increased education of pt | 4 | 0.4 |
| decreased duplication of supplies | 4 | 0.4 |
| improved documentation | 4 | 0.4 |
| care becomes outcome oriented | 3 | 0.3 |
| JCAHO interdisciplinary | | |
| approach met | 3 | 0.3 |
| increased time of insurance | | |
| coverage | 2 | 0.2 |
| increased pt confidence in | | |
| treatment | 2 | 0.2 |
| decreased physician office visits | 1 | 0.1 |
| total frequency | n=908=∑f | Σ%=100% |

The top 10 most frequently occurring terms per category were compiled in Table

11. Since the frequency distribution of the terms in each major category made large sets

of data, the top 10 terms in each major category were separated for ease in examination as
a group. Each term remains listed in rank order in its' particular major category. The data

Table 11. (continued).

| Major category | Term | |
|----------------|--------------------------------|------|
| References | | |
| | home care | |
| | hospital | |
| | medical center | |
| | elderly | |
| | mentally ill | |
| | pediatric | |
| | outpatient clinic | |
| | surgery | |
| | HIV | |
| | inner city | |
| Antecedents | | |
| | increased costs | |
| | multiple/complex needs require | |
| | integrated approach | |
| | fragmentation of care | |
| | DRG prospective payment system | |
| | nursing shortage | |
| | increased quality needs | |
| | healthcare reform | |
| | difficult access to services | |
| | long-term clients | |
| | LOS decrease needs | |
| | | (tał |

Table 11. (continued)

| Major category | Term | | |
|----------------|--|--|--|
| Attributes | | | |
| | interdisciplinary collaboration | | |
| | develops plan of care | | |
| | comprehensive assessment | | |
| | coordinates services | | |
| | frequent evaluation of progress | | |
| | monitors delivery of care | | |
| | coordinates care for specific population | | |
| | critical pathway use | | |
| | educates patient/family | | |
| | coordinates discharge planning | | |
| Consequences | | | |
| | decreased costs | | |
| | decreased LOS | | |
| | improved quality of care/QA | | |
| | increased staff satisfaction | | |
| | increased patient satisfaction | | |
| | decreased fragmentation of care | | |
| | improved patient outcomes | | |
| | increased efficiency | | |
| | standardization of care/continuity | | |
| | of services | | |
| | increased collaboration | | |

The last table addressed the sixth step in Rodgers' (1993) framework. Table 12 showed the differences in the 10 most frequent terms per major category that occurred

between the timeframes of: 1987 to 1991 and 1992 to 1995. In this table, the years were split with five years and four years respectively in each timeframe. Thus, each timeframe reflected approximately 50% of the sampled articles.

Evaluating these two timeframes indicated that some terms not only changed order of their rank within the top 10, but may have dropped out of or moved up into the top 10. It should be noted, however, that all the major categories had at least the top two terms ranked the same between both timeframes. Also, some major categories in the timeframes had more than 10 terms listed due to two or more terms being noted at the same frequency. For example, the major category of surrogate terms had 11 terms from 1987 to 1991 and 16 terms from 1992 to 1995. Whereas, the related concepts category had only nine terms total, a majority of these terms occurred in one timeframe.

Table 12

<u>Temporal Changes between 1987 to 1991 and 1992 to 1995 in Frequency Distribution of Top Ten Terms in Major Categories</u>

| Term in descending | Frequency in | Term in descending | Frequency in |
|--------------------|--------------|---------------------|--------------|
| order of frequency | 87-91 | order of frequency | 92-95 |
| | Surrog | ate terms (n=65) | |
| care management | 5 | care management | 12 |
| managed care | 4 | managed care | 6 |
| case coordination | 2 | case coordination | 6 |
| care coordination | 2 | care coordination | 4 |
| continuing care | 1 | outcomes management | 2 |
| coordination | | | |
| | | | |

Table 12. (continued)

| Term in descending | Frequency in | Term in descending | Frequency in |
|------------------------|--------------|-------------------------|--------------|
| order of frequency | 87-91 | order of frequency | 92-95 |
| service integration | 1 | continuing care | 1 |
| | | coordination | |
| service coordination | 1 | service integration | 1 |
| clinical case manager | 1 | service coordination | 1 |
| resource coordination | 1 | continuity coordination | 1 |
| health care management | 1 | clinical case manager | 1 |
| case assignment | 1 | managed competition | 1 |
| team managed care | 1 | health plan coordinator | 1 |
| discharge planner | 1 | program coordinator | 1 |
| | | collaborative care | 1 |
| | | intensive case | 1 |
| | | management | |
| | | utilization management | 1 |
| | Related | concepts (n=102) | |
| managed care | 24 | managed care | 38 |
| gatekeeper | 17 | gatekeeper | 9 |
| facilitator | 3 | facilitator | 2 |
| geriatric consultation | 1 | outcome management | 4 |
| utilization review | 1 | | |
| preadmission screening | 1 | | |
| discharge planning | 1 | | |
| social casework | 1 | | |
| Social case work | • | | |

Table 12. (continued)

| Term in descending | Frequency in | Term in descending | Frequency in |
|------------------------|--------------|-----------------------------|-------------------|
| order of frequency | 87-91 | order of frequency | 92-95 |
| | Refer | rences (n=653) | |
| home care | 65 | home care | 59 |
| hospital | 56 | hospital | 58 |
| medical center | 37 | medical center | 33 |
| elderly | 22 | elderly | 20 |
| mentally ill | 18 | surgery | 15 |
| pediatric | 15 | pediatric | 14 |
| outpatient clinic | 15 | mentally ill | 13 |
| inner city | 12 | cardiovascular | 10 |
| computer | 10 | HIV | 8 |
| HIV | 9 | rehab | 7 |
| | | adult ICU | 7 |
| | | outpatient clinic | 7 |
| | Antec | edents (n=723) | |
| increased costs | 51 | increased costs | 57 |
| multiple/complex needs | 43 | multiple/complex needs | 56 |
| require integrated | | require integrated approach | |
| approach | | | |
| DRG prospective | 37 | nursing shortage | 41 |
| payment system | | | |
| fragmentation of care | 30 | fragmentation of care | 39 |
| nursing shortage | 28 | DRG prospective payment | 30 |
| • | | system | |
| long-term clients | 25 | increased quality needs | 27 |
| | | | (table continues) |

Table 12. (Continued)

| Term in descending | Frequency in | Term in descending | Frequency in |
|--------------------------|--------------|-------------------------------|--------------|
| order of frequency | 87-91 | order of frequency | 92-95 |
| difficult access to care | 15 | health care reform | 27 |
| increased quality needs | 13 | LOS decrease needs | 21 |
| health care reform | 11 | difficult access to services | 18 |
| changing roles of health | 10 | long-term clients | 13 |
| professionals | | | |
| | Attribu | utes (n=3466) | |
| interdisciplinary | 104 | interdisciplinary | 122 |
| collaboration | | collaboration | |
| develops plan of care | 96 | develops plan of care | 109 |
| coordinates services | 84 | comprehensive assessment | 92 |
| comprehensive | 83 | coordinates care for specific | 86 |
| assessment | | population | |
| monitors delivery of | 72 | frequent evaluation of | 76 |
| care | | progress | |
| frequent evaluation of | 71 | critical pathway use | 70 |
| progress | | | |
| coordinates discharge | 47 | coordinates services | 69 |
| planning | | | |
| patient advocacy | 46 | monitors delivery of care | 60 |
| educates patient and | 45 | communication channels | 57 |
| family | | | |
| patient/family involved | 45 | educates patient and family | 52 |
| in goal | | | |
| setting/evaluation | | | |
| | | | |

Table 12. (continued)

| Term in descending | Frequency in | Term in descending | Frequency in |
|--------------------------|--------------|--------------------------------|--------------|
| order of frequency | 87-91 | order of frequency | 92-95 |
| | Consequ | ences (n=908) | |
| decreased costs | 63 | decreased costs | 71 |
| decreased LOS | 33 | decreased LOS | 53 |
| improved quality of | 31 | improved quality of | 44 |
| care/QA | | care/QA | |
| increased patient | 27 | increased staff satisfaction | 36 |
| satisfaction | | | |
| increased staff | 26 | increased patient satisfaction | 33 |
| satisfaction | | | |
| decreased fragmentation | 19 | improved patient outcomes | 30 |
| of care | | | ~ |
| standardization of | 17 | increased efficiency | 28 |
| care/continuity of | | | |
| services | | | |
| increased involvement | 16 | decreased fragmentation of | 27 |
| and responsibility of | | care | |
| family | | | |
| improved patient | 15 | increased collaboration | 25 |
| outcomes | | | |
| enhanced quality of life | 15 | standardization of | 19 |
| | | care/continuity of services | |
| facilitated provision of | 15 | | |
| services/access | | | |

Summary

Chapter III was comprised of the data analysis, demographic data, and results of the investigation. Frequency distributions were used in a descriptive analysis of the demographics of the sample, the major categories, and the 10 most frequent terms per major category that occurred. Temporal changes were examined with frequency distributions from the timeframes 1987 to 1991 and 1992 to 1995.

Chapter IV

Discussion of Findings

This chapter discussed the findings from the concept analysis of nursing case management. The discussion of the findings was not addressed in context of previous literature since all relevant literature on nursing case management was the database of the investigation. Steps 7 and 8 Rodgers' (1993) framework was the basis for organizing this section. The chapter also addressed the implications, recommendations for further study, and scope and limitations of the study.

Discussion

The use of Rodgers' (1993) framework for concept analysis of nursing case management has resulted in the identification of a description rather than a definition of the concept. This description resulted from an examination of the data and temporal changes within the major categories of surrogate terms, related concepts, references, antecedents, attributes, and consequences. From this description, a model case was selected to serve as an everyday example of the concept.

The concept analysis of nursing case management was a labor intensive investigation.

This was due in part to the already identified difficulty in determining an agreed upon definition of case management. It was evident by the multiple surrogate terms that were discovered in the sampled literature. Even though authors were able to identify nursing case management as a concept, some were unable to separate it from other concepts. This was further observed in the individuality of the articles, as nursing case management was a diversely described concept applied across a multitude of settings and populations.

A second difficulty in this concept analysis occurred because most of the authors did not specifically spell out the major categories as defined by Rodgers (1993). This left the decisions regarding term identification in category placement to this study's investigators. For example, whether "managed care" was approached as a related concept or surrogate term by the author. Sorting another term, such as "interdisciplinary collaboration," depended strongly on how it was used in a particular article. Depending on the context of the term's use, it could have shown up as an antecedent, attribute, or consequence.

In addition to the difficulties noted above, it was noted that throughout this large sample of literature few authors attempted to clearly define case management. Also, of those that had a definition, the author usually quoted another source, such as the American Nurses Association, or widely recognized nursing case management models, such as the New England Medical Center Model (Trinidad, 1993) and the Carondelet St. Mary's Model (Combs & Rusch, 1990). However, these authors only mentioned these models as examples or adapted them to a form that was more applicable to their particular situation.

Even without a cited definition of nursing case management, a general overview of this concept was gained from the sampled literature. Nursing case management represents more than just coordination of services, it is the coordination of health care for an individual. Nursing case management also was found either to be site-specific or to transcend care settings. This latter situation appeared to be the most prevalent trend in the literature. Authors used nursing case management in the way it best suited their purposes. Nurse case managers had their hand in every part of patient health care delivery from initial assessment to goal setting, intervention, implementation, monitoring, evaluation,

coordinating services, discharge planning, educating, advocating, collaborating, and consulting.

To begin the description of the concept of nursing case management from the general overview, surrogate terms must first be addressed. It was recognized that there may be multiple ways of expressing the same concept (Rodgers, 1993). Out of 351 articles, 22 identified surrogate terms of nursing case management were only addressed 65 times in total. Thus, the body of literature sampled supported, for the most part, that there was no need for the substitution in the terminology for nursing case management. The most frequent surrogate terms identified were care management and managed care, however, several terms were identified only once or twice. This could have been attributed to the individual authors of the articles and their preference in terminology usage.

The second major category of the investigation was related concepts. Some of the terms identified as surrogate terms also appeared as related concepts. This duplication may have been related to two factors. First, some authors did not distinguish between the characteristics of nursing case management and another concept, while other authors easily discriminated concepts that only held some relationship to nursing case management.

Rodgers' (1993) suggested that concepts do not exist by themselves, but instead are a part of a network of related concepts. This investigation demonstrated that nursing case management was often linked to managed care. The exact relationship between nursing case management and the other related concepts could not be easily described from the investigated literature. However, a strong connection between managed care and nursing

case management often was identified. Nursing case management was often seen as a subset of managed care. When nursing case management was addressed in this context, it was often viewed as an integral part of the managed care puzzle.

In addition to surrogate terms and related concepts, references were identified in this investigation. Two primary areas of references were evident: setting and population. The references provided an overall indication of actual situations and populations to which the concept was being applied. Nursing case management was observed to be utilized in the community, as well as easily used in several types of hospital care arenas. The references further demonstrated that nursing case management was not restricted to one particular population of clients. Thus, nursing case management had great flexibility.

While examining the antecedents, a few themes emerged as to the need for such diverse use of nursing case management. These catalysts often surrounded the issues of cost containment, fragmentation of care, and complex client needs. In addition, the literature appeared to weigh both the high costs of health care and the needs of the client almost equally as determinants for the need for nursing case management.

The attributes identified in this study gave an overview about how nursing case management has attempted to resolve the identified needs and issues necessitating nursing case management. Even though attribute terms showed up well over 3000 times, the distribution of terms was spread out fairly evenly, reflecting that nursing case management was approached in multiple ways. The sampled literature addressed three main types of nurses that acted as nurse case managers. Not only were clinical nurse specialists and nurse practitioners functioning in the role of case managers, the primary nurse caregiver

also assumed this role. A clear description of all the kinds of nurses performing case management was not clear in the literature. In fact, fifty percent of the articles omitted any specification or description of the case manager other than saying it was a nurse.

The literature, however, did provide a description of the tools, qualities, interrelationships, and processes of nursing case management. For example, some tools used by nursing case managers were careplans, critical pathways, communication channels, and documentation. Accountability, advocacy, and flexibility are some of the qualities of nurse case managers. Strong relationships were also found to exist within and between other disciplines related to improving communication, referrals, consults, or education. Several processes were identified that fell within the realm of a nurse case manager: coordination, monitoring, educating, intervening, researching, delegating, supervising, empowering, counseling, and analyzing.

Throughout the sampled literature, the integral parts of the nursing process were sometimes evident as a part of a nursing case management process. Some authors specifically cited processes of nursing case management such as assessing, planning, implementing, and evaluating. These processes may have been mentioned alone or in some combination.

The consequences noted in the sampled literature demonstrate that nursing case management has generally resulted in some impact upon high health care costs, fragmentation of care and complex client needs. These outcomes meet many of the needs that originally were described in the antecedents. Nursing case management had many effects not only on the client, but also on the systems with which the client interacted.

It should be noted that most of these consequences have not been verified in empirical studies.

Temporal Changes and Cross-Disciplinary Comparisons

Considerable change in nursing case management was noted over the span of the sampled literature in the investigation. According to Rodgers (1993), insight can be gained into the current and emerging trends of a concept by examining the concept over time. Since a distinct change was noted in the sampled literature around 1991, the data was separated between 1991 and 1992. This change was examined in the context of the top ten terms per major category.

When looking at surrogate terms, several terms separated out into only one time period or the other. However, those terms occurred only once, resulting in a frequency to small to determine trends. The term "outcomes management" appeared only after 1992 in both the major categories of surrogate terms and related concepts. With changing focuses in health care, this may have reflected the current interest in measurable outcomes.

With changes in health care, it is helpful to examine the context in which the concept nursing case management has most recently being used. Home care and hospital environments were still heavily addressed references in the sampled literature. This may have reflected that this concept remained effective in both the home and hospital environments. Nursing case management was found to not only follow patients within those environments, but also crossed boundaries to facilitate the care of several patient populations.

е

management was not only coordinating services but also coordinating care. Nursing case managers were not just discharge planners, many were in situations where they had the autonomy to affect treatment plans.

Interdisciplinary collaboration was another fundamental attribute of nursing case management. In order to effectively collaborate with others, nursing case managers have recognized the importance of having good communication channels. Critical pathways, a way to streamline communication and treatment plans, moved up into top 10 after 1992.

Attributes that dealt with implementation of nursing case management were less of a focus in the top 10 after 1992. Assessing, planning, and evaluation remained a significant part of the nursing case management process. This was not to say that implementation is not any less important, but attributes like "critical pathways" and "coordinates care for specific population" had become of increased interest to the authors in the sampled literature

When looking at the consequences or outcomes of nursing case management, it was apparent that there remained a focus on patient and staff satisfaction. Outcomes other than satisfaction have also been addressed. While decreasing costs and length of stay, nursing case management had not compromised the quality of care. Nursing case management had resulted in improved patient outcomes. In doing so, the literature notes that nursing case management was able to meet some of the top 10 needs that surfaced as antecedents. Nursing case management resulted in decreased fragmentation of care, health care costs, and length of stay. Increased efficiency and collaboration were both identified as important outcomes of nursing case management.

Another way to interpret data in a concept analysis was through cross-disciplinary comparisons. According to Rodgers (1993), this type of comparison may be helpful if the concept in nursing is generally thought to have been derived from another discipline. Perspectives of the other disciplines may then surface, allowing for clarification of their viewpoint and possibly, contributing to increased interdisciplinary collaboration. In this concept analysis of nursing case management, articles from other disciplines, such as medicine, psychology, sociology, health administration, insurance, business, education, and occupational therapy were noted. However, of the 351 articles in the sample, 318 (90%) were from the discipline of nursing. Articles from the other disciplines had such infrequent occurrence in the total sample that no significant conclusions or comparisons to nursing case management could be drawn.

Model Case

The purpose in identifying a model case, step 7 of Rodgers' (1993) framework, was to clarify the way nursing case management was being used, by providing an everyday example. According to Rodgers, the attributes, antecedents, and consequences of nursing case management should be clearly demonstrated in this model case. References were included to provide examples of the setting and/or population in which nursing case management was taking place.

The model case for nursing case management was identified by extracting articles that contained at least the top 10 attributes from the sample of 351 articles. This major category was addressed first, because it described most of the characteristics of nursing case management. Additional information in identifying how nursing case management

was being used was provided when the antecedents and consequences were included in the model case. This led to the next step in which the previously selected articles were examined for the inclusion of terms from the top ten list of antecedents and then consequences. Articles were excluded if they did not contain any antecedents or consequences. One model case emerged from the sampled literature.

It was important to maintain neutrality in choosing a model case (Rodgers, 1993).

Although the selected model case by Simmons (1992) was set in a trauma center and described the development of the trauma nurse case manager role, it was still a useful model to generically illustrate the concept of nursing case management. This model case discussed tools of nursing case management, such as a critical pathway. Simmons' article included a case study that demonstrated the nurse case manager's role. Research questions about the effectiveness of nursing case management were raised by Simmons that reflect back to the discussion of attributes, antecedents and consequences.

Simmons (1992) described a sample job description which is useful for any nurse case manager that included many attributes beyond that of the top 10 attributes. For example, she discussed the one attribute, "developing a plan of care," through the development of critical pathways and case management plans. Simmons further addressed this attribute through collaboration with physicians to identify patient problems, nursing interventions, physician processes, intermediate and final outcomes, and the time interval for treatments that spans the episode of illness. The model case addressed 18 additional attributes, which included: "evaluating and monitoring costs and resources;" "offering clinical support and expertise," and "providing and revising standards of care."

However, when examining the antecedents for this model case, only one antecedent was noted. This antecedent, "multiple and complex needs requiring an integrated approach," would not be unexpected in a discussion of trauma nursing case management. This particular antecedent was, however, still the second most frequently occurring term in the sampled literature. This emphasizes the model case's applicability to a general description of nursing case management.

This was also evident in the examination of the top 10 consequences found in this model case. The term that was noted, "decreased length of stay," was the second most frequently occurring consequence. There was also one consequence that was not in the top ten. "Decreased readmissions" was the twelfth most frequent term.

Implications

This investigation provided many implications for nursing practice, an examination of these will fulfill the eighth step of Rodgers' (1993) framework. Having provided a description of nursing case management, this investigation will improve the understanding of nursing case management as a concept. This study sought to clarify the concept of nursing case management by examining how it existed and was used. This concept analysis also expanded the knowledge base of nursing by contributing needed information for future developments in case management, nursing curriculum, and outcome measurements.

The model case identified served as an example of the concept, generating possible guidelines for future nursing case management program development. This model provided a means for nursing to examine the identified characteristics of nursing case

management, by viewing it in a tangible form. The model case reaffirmed the findings of the investigation. It illustrated how a working case management program based on the findings of this investigation can be brought into everyday nursing practice.

As nursing continues to incorporate nursing case management into everyday nursing practice, this concept analysis should produce useful information for nursing education. A clarification of nursing case management will aide in the curriculum development in both undergraduate and graduate programs. For example, "interdisciplinary collaboration" was one of the major attributes of nursing case management that was identified. This points to the need for interdisciplinary collaboration to be stressed in course content. Another example was based on the attributes of "episode-based care" and "transcends care settings." Educational courses using the nursing case management concept could be developed to assist student nurses in visualizing health care issues based not only on an episode of illness but across the continuum of illnesses.

In addition to education, the information gained from this concept analysis could facilitate guidelines for the evaluation of nursing case management. The identified consequences may be used as measurement outcomes for nursing case management interventions. For example, programs could be evaluated based on their achievements in decreasing length of stay and costs, and increasing quality of care, satisfaction, and efficiency.

Scope and <u>Limitations</u>

The scope of this investigation addressed nursing roles in case management, therefore, other disciplines were excluded from this study. Investigator bias was a potential

limitation in this concept analysis because interpretation of the author's definition and wordings was based on the investigator's view. Articles that were not accessible as well as books were not used in the data collection. It is possible that temporal changes temporal changes over the nine year span that was covered in this investigation may have skewed some of the characteristics that were identified.

Summary

An overall view of the investigation was presented through the discussion of findings in Chapter IV. The findings were addressed in the context of all six major categories. The use of temporal changes and a model case further clarified the concept of nursing case management. Implications and recommendations for research were suggested based on the description of nursing case management given by this investigation. Lastly, the limitations of the study were addressed in this chapter.

Chapter V

Summary of the Study

Chapter V was a summary of the findings from this investigation. This chapter reviewed the purpose of the study. An overview of methodology and procedures included the setting, sample, and data collection and analysis. Findings were presented in order of the six major categories followed by the conclusion.

Purpose of the Study

The purpose of this investigation was to clarify the concept of nursing case management as it was described and applied in the literature. The findings of this investigation produced a clearer understanding of nursing's role in case management. To ease the conceptual problems concerning nursing case management, a concept analysis was employed. A model case illustrating these characteristics was identified along with implications for nursing practice and suggested research.

Need for the Study

Reform initiatives in health care delivery systems stimulated an accelerated interest in case management. However, case management differed between and within many contexts and environments including: programs of insurance-based, employer-based, worker's compensation, or third party payers; and practices of nursing, medicine, mental-health, or social services (Smith, 1995). Case management, frequently used as a complex concept in health care, was not easily limited to a single agreed upon definition. The difficulty in defining case management laid in the fact that it had several meanings (Molloy, 1994). Often, several terms were intermingled or interchanged with case management.

vincluded service management, care coordination, care management, patient care ning, and managed care. With the variety of terms used, not only did the consumer ome confused about strengths, weaknesses, and purposes of services, but also the on providing the services.

laving the ability to function in multiple health care settings, nursing could easily adapt neet multiple client needs. Nurse case managers combined case management with ct nursing care, provided a more comprehensive assessment of health than other health ressionals serving as case managers (Newman, Lamb, & Michaels, 1991). The holistic roach and unique skills and knowledge base of nursing, extended beyond the physiological and pathological aspects of care, made the nurse the most appropriate vider to serve as case manager (Smith, 1995). The clarification of nursing case nagement through concept analysis expanded the knowledge base for nurses to ction in the role of case manager.

Methods and Procedures

This investigation applied the method of concept analysis described by Rodgers (1993) terature of various disciplines which addressed a nursing role in case management. A cept analysis has been described as a strategy for eliciting meaning (Chinn & Kramer, 1). This allowed the intent in use of the concepts to be uncovered. A retrospective broach to this concept analysis was used to follow Rodgers' framework. According to dgers, concept analysis by this evolutionary method used the following steps:

- 1. Identify the concept of interest and alternate terms.
- 2. Identify and select a suitable setting and sample for data collection.

and

ation:
ine,
t or

ıdex,

s were

and the

de based

g

dy.

nd year.

TO

Table 1

Frequency of Demographic Data by Discipline and Year for Sample (N=351)

| | Frequency | Frequency % |
|------------|-----------|-------------|
| Discipline | | |
| Nursing | 318 | 90.6 |
| Medicine | 5 | 1.4 |
| Psychology | 8 | 2.3 |
| Sociology | 6 | 1.7 |
| Other | 14 | 4.0 |
| Year | | |
| 1995 | 7 | 2.0 |
| 1994 | 79 | 22.5 |
| 1993 | 56 | 16.0 |
| 1992 | 45 | 12.8 |
| 1991 | 65 | 18.5 |
| 1990 | 43 | 12.3 |
| 1989 | 37 | 10.5 |
| 1988 | 18 | 5.1 |
| 1987 | 1 | 0.3 |

Data Collection and Analysis

Each article was read in its entirety to aid in the identification of the general content and tone of each of the articles. Statements were identified that focused on the following major categories described by Rodgers (1993) in step 3 and 4 of her framework: surrogate terms, related concepts, references, antecedents, attributes and consequences. Statements and phrases were inductively grouped into these categories. Data terms in the

form of one word or a few word phrases were derived from the content of each article on each major category.

TO

Descriptive analysis was performed to profile the major categories and the ten most frequent terms per major category that occurred. The frequency distribution allowed the data to be organized and tabulated. Temporal changes in the 10 most frequent occurring terms were also examined.

Findings and Conclusions

Surrogate Terms

Out of 351 articles, 22 identified surrogate terms of nursing case management were only addressed 65 times in total. Thus, the body of literature sampled supported, for the most part, that there was no need for the substitution in the terminology for nursing case management. The most frequent surrogate terms identified were "care management" and "managed care," however, several terms only showed up once or twice. This could be attributed to the individuality of the individual authors of the articles and their preference in terminology usage.

Related Concepts

There were nine identified related concepts. Some of the terms identified as surrogate terms also appeared as related concepts. Those terms were "managed care," "outcomes management," "utilization review," and "discharge planning." "Managed care" was the most frequent related concept, whereas it was the second most frequent surrogate term found in the sample literature. This duplication may have been related to two factors. Whereas some authors did not distinguish between the characteristics of nursing case

management and another concept, other authors easily discriminated concepts that only held some relationship to nursing case management.

Rodgers' (1993) suggested that concepts do not exist by themselves, but instead are a part of a network of related concepts. This investigation demonstrated that nursing case management is often linked to managed care. The exact relationship between nursing case management and the other related concepts could not be easily described from the investigated literature. However, a strong connection between managed care and nursing case management often was identified. Nursing case management was often seen as a subset of managed care. When nursing case management was addressed in this context, it was often viewed as an integral part of the managed care puzzle.

References

Out of a total of 39 references observed in the sampled literature, two primary areas of reference were evident: setting and population. The references gave a good overall indication of actual situations and populations to which the concept was being applied. Not only has nursing case management been shown to be utilized in the community, but it has moved easily into several kinds of hospital care arenas. As the top references, "home care" and "hospital" settings were noted at a closely related frequency. The references further demonstrated that nursing case management was not restricted to one particular population of clients. Thus, nursing case management had great flexibility.

Antecedents

While examining the antecedents, a few themes emerged out of the 31 antecedents identified that attested to the need for such diverse use of nursing case management.

These catalysts often surrounded the issues of cost containment, fragmentation of care, and complex client needs. It was interesting to note that the literature weighed both the high costs of health care and the needs of the client almost equally as determinants for the need for nursing case management.

Attributes

Even though attribute terms showed up 3466 times, the distribution of terms was spread out fairly evenly, reflecting that nursing case management was approached in multiple ways. The sampled literature noted three main types of nurses that acted as nurse case managers. Not only were clinical nurse specialists and nurse practitioners functioning in the role of case managers, the primary caregiver also assumed this role. A clear description of all the types of nurses performing case management was not clear in the literature. Fifty percent of the articles did not specify a description of the case manager other than saying it was a nurse.

However, the literature did give a good description of the tools, qualities, interrelationships, and processes of nursing case management. For example, some tools of the nursing case manager were careplans, critical pathways, communication channels, and documentation. Accountability, advocacy, and flexibility were some of the qualities. Strong relationships existed within and between other disciplines, whether it was improving communication, referrals, consults, or education. Several processes were identified that fell in the realm of a nurse case manager: coordination, monitoring, educating, intervening, researching, delegating, supervising, empowering, counseling, and analyzing.

Consequences

The 36 consequences noted in the sampled literature demonstrate that nursing case management had generally resulted in some impact upon high health care costs, fragmentation of care and complex client needs. These outcomes met many of the needs that originally were described in the antecedents. Nursing case management had many effects not only on the client, but also on the systems with which the client interacted. It was noted that most of these consequences had not been verified in empirical studies. Temporal Changes

Considerable change in nursing case management was noted over the span of the sampled literature in the investigation. According to Rodgers (1993), insight can be gained into the current and emerging trends of a concept by examining the concept over time. Since a distinct change was noted in the sampled literature around 1991, the data was separated between 1991 and 1992. This change was examined in the context of the top ten terms per major categories.

The term "outcomes management" appeared only after 1992 in both the major categories of surrogate terms and related concepts. With changing focuses in health care, this reflected the current interest in measurable outcomes.

Home care and hospital environments were still heavily addressed references in the sampled literature. This was a reflection that this concept remains effective in both environments. Nursing case management not only followed patients within those environment, but also crossed those boundaries to facilitate the care of several patient populations. With the same intensity, nursing case management was still addressing the

complex health needs of the elderly, pediatric, mentally ill, and HIV clients. Recent changes in nursing case management references were reflecting a more detailed approach to patient populations, by focusing on subgroups, such as cardiovascular patients.

"Increased costs," "DRG prospective payment systems," and "health care reforms" were antecedents that were still currently being addressed in nursing case management. As a fallout from these terms, "decreased length of stay" appeared in the top 10 antecedents after 1992. The needs generated by this decreased length of stay were also linked to the other antecedents "difficult access to services," "fragmentation of care," and "patients being discharged earlier with multiple and complex needs requiring an integrated approach." As an additional antecedent to nursing case management, "nursing shortage" was mentioned in both time frames. It was expected that nursing shortage would decrease after 1992, however, it actually increased in frequency. It was interesting to consider whether a nursing shortage was continuing to occur in the nursing profession, or whether the authors were addressing the downsizing of nursing staff as a "nursing shortage."

Case management has moved away from coordination activities in a service line approach to working within a specific patient population. For instance, instead of case managing all patients in a pediatric clinic, the focus may have been more on the asthmatic patients in that clinic. After 1992, nursing case management was not only coordinating services but also coordinating care. Nursing case managers were not just discharge planners, many were in situations where they had the autonomy to affect treatment plans. Interdisciplinary collaboration was another fundamental attribute of nursing case management. In order to effectively collaborate with others, nursing case managers had

recognized the importance of having good communication channels. Critical pathways, a way to streamline communication and treatment plans, moved up into top 10 after 1992.

When looking at the consequences or outcomes of nursing case management, it was apparent that there remained a focus on patient and staff satisfaction. Whereas decreasing costs and length of stay, quality of care had not been compromised and nursing case management had resulted in improved patient outcomes. A decrease in fragmentation of care, health care costs, and length of stay and an increase in efficiency and collaboration had all became important outcomes of nursing case management.

Model Case

Rodgers' (1993) purpose in identifying a model case was to clarify the way nursing case management was being used by providing an everyday example. According to Rodgers, the attributes, antecedents, and consequences of nursing case management should be clearly demonstrated in this model case. References were included to provide examples of the setting and/or population in which nursing case management was taking place.

The model case for nursing case management was identified by extracting articles that contained at least the top 10 attributes from the sample of 351 articles. This major category was addressed first, because it describes most of the characteristics of nursing case management. One model case emerged from the sampled literature that also contained some of the top 10 antecedents and consequences.

The selected model case by Simmons (1992) was set in a trauma center and described the development of the trauma nurse case manager role. This model case discussed tools

of nursing case management, such as a critical pathway. Simmons' article included a case study that demonstrated the nurse case manager's role.

Simmons (1992) described a sample job description which was useful for any nurse case manager that included many attributes beyond that of the top 10 attributes. For example, she discussed the one attribute, "developing a plan of care," through the development of critical pathways and case management plans. Simmons addressed this through collaboration with physicians to identify patient problems, nursing interventions, physician processes, intermediate and final outcomes, and the time interval for treatments that spans the illness. The model case addressed eighteen additional attributes, such as: "evaluating and monitoring costs and resources;" "offering clinical support and expertise;" and "providing and revising standards of care."

Recommendations for Future Research

Most of the literature in this investigation was not based on research but rather on descriptive information. Therefore, more research into nursing case management is warranted. Recommendations for research were made as advocated by Rodgers (1993) in the eighth step. This concept analysis was the first step into a greater understanding of nursing case management. At this time there is little basis for research in nursing case management because there is great disagreement as to the use and purpose of it. This investigation supplied a common ground upon which future research can be based. Further research into the concept of nursing case management by interdisciplinary comparisons, validation of findings, and intradisciplinary comparisons will assist in the continuing theoretical development associated with this concept.

The findings of this investigation provided a unique data base that may be useful for further investigation into nursing case management. According to Rodgers (1993), results of a concept analysis does not provide the final definition of a concept, but promotes and gives direction for additional research. Before further research can adequately take place, research is needed to validate whether the terms under each major category are applicable to current nursing case management practice in the field. Additional clarification may result from replication in a practice setting since this concept analysis was only based on how nursing case management is described and applied in the literature.

With the multiplicity of disciplines in which case management is carried out, the differentiation of nursing case management from these disciplines may decrease the duplication of services. This can be carried out by designing research to assess whether the identified characteristics of nursing case management are the same or differ for other disciplines. The focus of this research should be more on the antecedents, attributes, and consequences than surrogate terms, related concepts, and references.

In addition to differentiating nursing case management from other disciplines, further evaluation into the dimensions of the concept of nursing case management is needed to enhance the existing knowledge base. Strategies need to be employed through intradisciplinary studies to delineate the differences between settings, the providers, and the population of nursing case management. This may help clarify the concept further by controlling for the immense individuality which was shown in the sampled literature.

Bibliography

- "References marked with an asterisk indicate articles included in the concept analysis."
- *Abrahams, R., Capitman, J., Leutz, W., & Macko, P. (1989). Variations in care planning practice in the social/HMO: An exploratory study. The Gerontologist, 29 (6), 725-736.
- *Adams, R. A. & Rentfro, A. R. (1991). Strengthening hospital nursing: An approach to restructuring care delivery. <u>Journal of Nursing Administration</u>, 21 (6), 12-19.
- *Ahmann, E. & Lierman, C. (1992). Promoting normal development in technology-dependent children: An introduction to the issues. <u>Pediatric Nursing</u>, 18 (2), 143-148.
- *Allred, C. A., Arford, P. H., Michel, Y., Veitch, J. S., Dring, R., & Carter, V. (1995). Case management: The relationship between structure & environment. Nursing Economics, 13 (1), 32-51.
- *American Association of Occupational Health Nurses. (1994). Position statement:
 The occupational health nurse as a case manager. AAOHN Journal, 42 (4), 155.
- American Nurses Association. (1988). <u>Nursing Case Management</u>. (Publication No. NS-32). Kansas City: American Nurses Association.
- *Anderson, D. (1989). Opportunity knocks at last...the time is ripe for the nursing profession to assert it's value. RN, 52 (10), 52-56, 59-60, 63...
- *Anonymous. (1993). Case management smooths care delivery to patients. <u>Hospital</u> Home Health, 10 (7), 96-97.
- *Bair, N. L., Griswold, J. T., & Head, J. L. (1989). Clinical RN involvement in bedside-centered case management. Nursing Economics, 7 (3), 150-154.

- *Balzer, J. (1994). The power to care: The positive aspects of case management.

 Journal of Home Health Care Practice, 6 (2), 12-16.
- *Barkauskas, V. H. (1994). Case management within home care. <u>Home Healthcare</u> Nurse, 12 (1), 8.
- *Bedore, B. & Leighton, L. (1989). Ventilator-dependent children: Comprehensive home management. Caring, 8 (5), 50-52, 54-55.
- *Bejciy-Spring, S. M. (1991). Nursing case management: Application to neuroscience nursing. <u>Journal of neuroscience nursing</u>, 23 (6), 390-397.
- *Bell, P. L. (1994). Neonatal case management: A challenge for advanced practice nurses. <u>Journal of Perinatal Neonatal Nursing</u>, 8 (2), 48-56.
- *Bergen, A. (1994). Case management in the community: Identifying a role for nursing. <u>Journal of Clinical Nursing</u>, 3 (4), 251-257.
- *Bernton, C. (1990). Case management ...new career field for nurses. Maryland Nurse, 9 (2), 5.
- *Bero, A. F. & Gillmore, V. L. (1994). Small hospital makes best use of existing staff. Hospital Case Management, 2 (5), 75-78.
- *Bickley, J. (1993). Case management studied. Nursing New Zealand, 1 (7), 10.

 *Biller, A. M. (1992). Implementing nursing case management. Rehabilitation

 Nursing, 17 (3), 144-146.
- *Black, J. (1989). Case management for plastic surgical nurses. <u>Plastic Surgical Nursing</u>, 9 (1), 5.

- *Blake, K. (1991). Rehabilitation nursing program management. Nursing

 Management, 22 (1), 42-44.
- *Borgford-Parnell, D. (1994). A homeless teen pregnancy project: An intensive team case management model. <u>American Journal of Public Health</u>, 84 (6), 1029-1030.
- *Borland, A., McRae, J., & Lycan, C. (1989). Outcomes of five years of continuous intensive case management. Hospital and Community Psychiatry, 40 (4), 369-376.
- *Bradley, P. J., & Martin, J. (1994). The impact of home visits on enrollment patterns in pregnancy-related services among low-income women. <u>Public Health Nursing</u>, 11 (6), 392-398.
- *Bradshaw, J. D. & Benafield, R. B. (1993). Case management. <u>Journal of the Arkansas Medical Society</u>, 89 (12), 596-597.
- *Brandt, L. (1988). Comprehensive case managers: Pulling it all together.

 Minnesota Medicine, 71 (5), 263.
- *Brault, G. L. & Kissinger, L. D. (1991). Case management: Ambiguous at best.

 <u>Journal of Pediatric Health Care, 5</u> (4), 179-183.
- *Bremer, A. (1989). A description of community health nursing practice with the community-based elderly. <u>Journal of Community Health Nursing</u>, 6 (3), 173-184.
- *Brockopp, D. Y., Porter, M., Kinnaird, S., & Silberman, S. (1992). Fiscal and clinical evaluation of patient care. <u>Journal of Nursing Administration</u>, 22 (9), 23-27.
- *Brown, K. C. (1989). Containing health care costs: The occupational health nurse as case manager. <u>Journal of Nursing Administration</u>, 37 (3) 141-142.

- *Brubakken, K. M., Janssen, W. R., & Ruppel, D. L. (1994). CNS roles in implementation of a differentiated case management mode. <u>Clinical Nurse Specialist</u>, 8 (2), 69-73.
- *Brucker, J. M. (1992). Developing a pediatric neuro-oncology case manager. Journal of Pediatric Nursing, 7 (1), 77-78.
- *Bunch, D. (1989). Helping ventilator-assisted kids go home. <u>AARC Times, 13</u> (8), 60-63.
- *Butera, E. (1989). Case management and chronic illness. <u>ANNA Journal</u>, 16 (7), 460.
- *Carroll, J. T. & Graner, M. E. (1994). Hospice is managed care. <u>Journal of Home</u> Health Care Practice, <u>6</u> (2), 49-54.
- *Carwein, V. & Longley, C. (1989). AIDS dementia: Assessment and interventions for home hospice care. <u>Caring</u>, 8 (6), 20-24.
- *Chase, C. R. (1994). Development of a case management plan for aortoiliac bypass graft surgery patients. Seminars in Perioperative Nursing, 3 (1), 16-21.
- *Chenger, P. L. & Erickson, S. (1993). The cost-effectiveness of coordinated care: How managed care and case management impact healthcare delivery. <u>Tennessee Nurse</u>, <u>56</u> (2), 12-13.
- *Chimner, N. E. & Easterling, A. (1993). Collaborative practice through nursing case management. Rehabilitation Nursing, 18 (4), 226-230.
- Chinn, P. & Kramer, M. (1991). <u>Theory and Nursing: A Systematic Approach</u> (3rd ed.). St. Louis: Mosby.

- Cline, K. (1993). Certification update: preparing for the first CM examination. <u>Case</u>

 <u>Management</u>, 4 (), 19-21.
- *Clough, J. & Thomas, K. (1992). Health promotion/illness prevention through wellness clinics and nursing case management. <u>Arizona Nurse</u>, 45 (3), 1.
- *Cohen, E. L. (1991). Nursing case management: Does it pay? <u>Journal of Nursing</u>
 Administration, 21 (4), 20-25.
- *Combs, J. A. & Rusch, S. C. (1990). Creating a healing environment: Nurse case managers address pregnant teenagers' needs-physical, emotional, and spiritual. <u>Health</u> Progress, 71 (4), 38-41.
- *Comparing case management. (1993). <u>Journal of Nursing Administration</u>, 23 (1), 6, 38, 59.
- *Connors, H. R. (1989). Impact evaluation of a statewide continuing education program. The Journal of Continuing Education in Nursing, 20 (2), 64-69.
 - *Conti, R. (1989). The nurse as case manager. Nursing Connections, 2 (1), 55-58.
- *Conway, C. (1991). The clinical nurse specialist and PPS reimbursement. Nursing Management, 22 (5), 60.
- *Counsell, C. M., Guin, P. R., & Limbaugh, B. (1994). Coordinated care for the neuroscience patient: Future directions. <u>Journal of Neuroscience Nursing</u>, 26 (4), 245-250.
- *Creaser, T., Kemph, R., & Burns, D. (1993). Nursing case management in a rural setting. The Kansas Nurse, 68 (3), 3-4.

- *Cronin, C. J. & Madlebust, J. (1989). Case-managed care: Capitalizing on the CNS. Nursing Management, 20 (3), 38-47.
- *Crummette, B. D. & Boatwright, D. N. (1991). Case management in inpatient pediatric nursing. Pediatric Nursing, 17 (5), 469-473.
- *Czerenda, A. J. & Best, L. (1994). Tying it all together: Integrating a hospital-based health care system through case management education. <u>Journal of Case Management</u>, 3 (2), 69-87.
- *Daleiden, A. L. (1993). The CNS as trauma case manager: A new frontier. Clinical Nurse Specialist, 7 (6), 295-298.
- *Daly, B. J., Phelps, C., & Rudy, E. B. (1991). A nurse-managed special care unit. Journal of Nursing Administration, 21 (7/8), 31-38.
- *Daly, B. J., Rudy, E. B., Thompson, K. S., & Happ, M. B. (1991). Development of a special care unit for chronically critically ill patients. <u>Heart and Lung, 20</u> (1), 45-51.
- *Damato, E. G. (1991). Discharge planning from the neonatal intensive care unit.

 Journal of Perinatal Neonatal Nursing, 5 (1), 43-53.
- *Davidson, R. E., Factor, R., Gundlach, E., & Adler, K. (1986). Psychiatric nursing roles in a community mental health center. <u>Community Mental Health Journal</u>, 24 (1), 83-86.
- *Davis, B. D. & Steele, S. (1991). Case management for young children with special health care needs. Pediatric Nursing, 17 (1), 15-19.
- *DeBusk, R. F., Miller, N. H., Superko, H. R., Dennis, C. A., Thomas, R. J., Lew, H. T., Berger III, W. E., Heller, R. S., Rompf, J., Gee, D., Kraemer, H. C., Bandura, A.,

Ghandour, G., Clark, M., Shah, R. V., Fisher, L., & Taylor, C. B. (1994). A case-management system for coronary risk factor modification after acute myocardial infarction. <u>Annals of Internal Medicine</u>, 120 (9), 721-729.

*Dees, J. P. & Taylor, J. R. (1990). Health care management: A tool for the future. AAOHN Journal, 38 (2), 52-58.

*Del Togno-Armanasco, V., Olivas, G. S., & Harter, S. (1989). Developing an integrated nursing case management model. Nursing Management, 20 (10), 26-29.

*Dienemann, J. & Gessner, T. (1992). Restructuring nursing care delivery systems.

*DeZell, A. V. D., Comeau, E., & Zander, K. (1987). Nursing case management:

Managed care via the nursing case management model. National League for Nursing

Publications, 2 (20-2191), 253-264.

Nursing Economics, 10 (4), 253-258.

*DiJerome, L. (1992). The nursing case management computerized system: Meeting the challenge of health care delivery through technology. Computers in Nursing, 10 (6), 250-258.

*Dodson, C. (1993). Nursing case management: Addresses rural access. <u>The Oregon Nurse</u>, 58 (1), 6-7.

*Dowling, G. F. (1991). Case management nursing: Indications for materiel management. Hospital Materiel Management Quarterly, 12 (3), 26-32.

*Dring, R., Hiott, B., & Elliott, K. (1994). Case management: A case study. <u>Journal</u> of Neuroscience Nursing, 26 (3), 166-169.

- *Dubois, M. M. (1990). Community-based home care programs are not for everyone-yet. Caring, 9 (7), 24-28.
 - *Dunston, J. (1990). How managed care can work for you. Nursing, 20 (10), 56-59.
 - *Ebersole, P. (1990). The future of gerontic nursing. NSNA/Imprint, 37 (4), 59-61.
- *Edelstein, E. L. & Cesta, T. G. (1993). Nursing case management: An innovative model of care for hospitalized patients with diabetes. <u>The Diabetes educator</u>, 19 (6), 517-521.
- *Egan, M. O. (1991). Winning the PRO game in the mental health arena. <u>Journal of</u> Nursing Quality Assurance, 5 (4), 41-49.
- *Eggert, G. M., Friedman, B., & Zimmer, J. G. (1990). Models of intensive case management. Journal of Gerontological Social Work, 15 (3-4), 75-101.
- *Elizondo, A. P. (1994a). Nursing case management in the neonatal intensive care unit: Pioneering new territory. Neonatal Network, 13 (8), 9-12.
- *Ely, B., Walker, R., & Berger, T. (1993). Case management in a small rural hospital.

 Nursing Administration Quarterly, 17 (3), 39-44.
- *Erickson, B. & Perkins, M. (1994). Interdisciplinary team approach in the rehabilitation of hip and knee arthroplasties. The American Journal of Occupational Therapy, 48 (5), 439-441.
- *Erkel, E. A., Morgan, E. P., Staples, M. A., Assey, V. H., & Michel, Y. (1994). Case management and preventive services among infants from low-income families.

 Public Health Nursing, 11 (5), 352-360.

- *Esler, R., Bentz, P., Sorensen, M., & Van Orsow, T. (1994). Patient-centered pneumonia care: A case management success story. <u>American Journal of Nursing, 94</u> (11), 34-38.
- *Esposito, L. (1994). Home health case management: Rural caregiving. <u>Home</u>

 <u>Healthcare Nurse</u>, 12 (3), 38-43.
- *Ethridge, P. (1988). Professional nurse/case management reduces hospital costs.

 <u>Arizona Nurse, 41</u> (5), 1, 7-8.
- *Ethridge, P. (1988/9). Nursing innovation cuts hospital costs. New Mexico Nurse, 23 (4), 6-7.
- *Ethridge, P. (1991). A nursing HMO: Carondelet St. Mary's experience. Nursing Management, 22 (7), 22-27.
- *Ethridge, P. & Lamb, G. S. (1989). Professional nursing case management improves quality, access and costs. <u>Nursing Management</u>, 20 (3), 30-35.
- *Faherty, B. (1990). Case Management the latest buzzword: What it is, and what it isn't. Caring Magazine, 9 (7), 20-22.
- *Faherty, B. L. (1991). The nurse legal consultant and disabling injuries.

 Rehabilitation Nursing, 16 (1), 30-33.
- *Feltes, M., Wetle, T., Clements, E., Crabtree, B., Dublitzky, D., & Kerr, M. (1994).

 Case managers and physicians: Communication and perceived problems. <u>Journal of the</u>

 American Geriatrics Society, 42 (1),5-10.

*Fielo, S. B. & Crowe, R. L. (1993). A college-managed nursing center offers training in case management for nursing students. <u>Journal of Case Management</u>, 2 (4), 147-152.

*Fitzgerald, J. F., Smith, D. M., Martin, D. K., Freedman, J. A., & Katz, B. P. (1994).

A case manager intervention to reduce readmissions. <u>Archives of Internal Medicine</u>, 154

(15), 1721-1729.

*Fondiller, S. H. (1991). Norhteast job focus: How case management is changing the picture. American Journal of Nursing, 91 (1), 63-64, 66, 68.

*Forchuk, C., Beaton, S., Crawford, L., Ide, L., Voorberg, N., & Bethune, J. (1989).

Incorporating Peplau's theory and case management. <u>Journal of Psychosocial Nursing, 27</u>
(2), 35-38.

*Ford, R. & Repper, J. (1994). Taking responsibility for care. Nursing Times, 90 (31), 54-55, 57.

*Ford, R. & Ryan, P. (1992). Meeting needs with case management. Nursing Standard, 6 (39), 29-32.

*Fox, B. (1989). Doing more with less: Revitalizing discharge planning. <u>Discharge</u>

<u>Planning Update, 9</u> (1), 6-8.

*Fox, S., Ehreth, J., Issel, L. M. (1994). A cost evaluation of a hospital-based perinatal case management program. <u>Nursing Economics</u>, 12 (4), 215-220.

*Gerber, L. S. (1994). Case management models: Geriatric nursing prototypes for growth. Journal of Gerontological Nursing, 20 (7), 18-24.

*Gibson, S.J., Martin, S. M., Johnson, M. B., Blue, R., & Miller, D. S. (1994). CNS-directed case management: Cost and quality in harmony. <u>Journal of Nursing</u>

<u>Administration, 24</u> (6), 45-51.

*Gillerman, H. & Beckham, M. H. (1991). The postpartum early discharge dilemma:

An innovative solution. Journal of Perinatal Neonatal Nursing, 5 (1), 9-17.

*Gillette, Y., Hansen, N. B., Robinson, J. L., Kirkpatrick, K., & Grywalski, R. (1991).

Hospital-based case management for medically fragile infants: Program design. <u>Patient</u>

<u>Education and Counseling, 17</u> (1), 59-70.

*Gillies, C. (1991). Nonsurgical management of the infant with gastroesophageal reflux and respiratory problems. <u>Journal of the American Academy of Nurse Practitioners</u>, <u>3</u> (1), 11-16.

*Ginder, M. S. (1990). Developing case managers in a rehabilitation unit.

Rehabilitation Nursing, 15 (1), 38-39.

*Girard, N. (1994). The case management model of patient care delivery. <u>AORN</u>

<u>Journal</u>, 60 (3), 403-412.

*Giuliano, K. K. & Poirier, C. E. (1991). Nursing case management: Critical pathways to desirable outcomes. <u>Nursing Management</u>, 22 (3), 52-55.

*Good, M. E. (1992). The clinical nurse specialist in the school setting: Case management of migrant children with dental disease. <u>Clinical Nurse Specialist</u>, 6 (2), 72-76.

*Goodwin, D. R. (1994). Nursing case management activities: How they differ between employment settings. Journal of Nursing Administration, 24 (2), 29-34.

Goosen, G.M. (1989). Concept Analysis: An approach to teachin physiologic variables. <u>Journal of Professional Nursing</u>, 5 (1), 31-38.

*Gordon, M. L. (1992). Case management: Professional excellence and quality care.

<u>Ohio Nurses Review, 67</u> (3), 10.

*Graham, B. (1989). Preparing case managers: For expanded home care services.

Caring, 8 (2), 22-23

Grau, L. (1984). Case management and the nurse. Geriatric Nursing, 5 (6), 372-375.

*Green, S. (1990). The impact of case managment. Michigan Nurse, 63 (5), 4.

*Griffith, H. M., Evans, M., Irvin, B., Thomas, N., Shinavier, B., Acton, G., Baas, L., Tyler, D., Knowland, E., Perkins, C., Martin, K., O'Hara, R., Robertson, S., Schlaifer, M., Ruiz, S., Lewis, S., Robinson, K., & Meek, S. (1991). Nurses' perspectives on a national health plan. Nursing Outlook, 39 (4), 178-182.

*Griffiths, R. D. & Moses, R. G. (1991). Implementing a holistic approach to diabetes care. The Diabetes Educator, 17 (2), 125-128.

*Grigsby, S. F. & Luque, Y. (1991). Comprehensive, coordinated care for persons with AIDS. <u>Caring Magazine</u>, 10 (7), 10-12, 15-16.

*Guinan, J. K. (1993). Facility-based case management: Its role in rehabilitation nursing. <u>Rehabilitation Nursing</u>, <u>18</u> (4), 254-256.

*Gunderson, L. & Kenner, C. (1992). Case management in the neonatal intensive care unit. <u>AACN Clinical Issues</u>, 3 (4), 769-776.

*Hale, C. (1995). Case management and managed care. Nursing Standard, 9 (19), 33-34.

*Hansen, S., Holaday, B., & Miles, M. S. (1990). The role of pediatric nurses in a federal program for infants and young children with handicaps. <u>Journal of Pediatric</u>

<u>Nursing, 5</u> (4), 246-251.

*Hayes, M. B. & McDonald, M. (1990). The home health care delivery crisis for patients with chronic respiratory disease: Effects of DRGs. <u>Journal of Home Health Care Practice</u>, 2 (2), 1-6.

*Hemphill, N. P. & Biester, D. J. (1994). Case management in a reformed health care system. Journal of Pedicatric Nursing, 9 (2), 124-125.

*Henderson, M. G. & Collard, A. (1988). Measuring quality in medical case management programs. Quality Review Bulletin, 14 (2), 33-39.

*Henderson, M. G., Souder, B. A., Bergman, A., & Collard, A.F. (1988). Private sector initiatives in case management. <u>Health Care Financing Review</u>, Spec No: 89-95.

*Herrick, C. A., Goodykoontz, L., Herrick, R. H., & Hackett, B. (1991). Planning a continuum of care in child psychiatric nursing a collaborative effort. <u>Journal of Child & Adolescent Psychiatric & Mental Health Nursing</u>, 4 (2), 41-48.

*Hess, A. (1992). Nursing case management and nursing diagnosis. <u>The Kansas</u>

<u>Nurse, 67</u> (4), 1-3.

*Hey, M. (1993). Nursing's renaissance: An innovative continuum of care takes nurses back to their roots. <u>Health Progress</u>, 74 (8), 26-32.

*Hickey, C. A. & Covington, C. (1990). Maternal phenylketonuria: Case management as a preventive approach to a chronic condition affecting pregnancy.

NAACOG Clinical Issues in Perinatal and Women's Health Nursing, 1 (2), 214-225.

- *Hicks, L., Stallmeyer, J. M., & Coleman, J. R. (1992). Nursing challenges in managed care. <u>Nursing Economics</u>, 10 (4), 265-276.
- *Higgins, R. (1994). Implementing case management in mental health services.

 <u>Journal of Nursing Management</u>, 2 (1), 25-30.
- *Hill, L. V. & Thompson, M. K. (1994). Case management of technology-dependent children: A family-centered approach. <u>Journal of Home Health Care Practice</u>, 6 (2), 37-41.
- *Hinzman, C. (1994). Case managment experience helps RN students incorporate professional role attributes. Nurse Educator, 19 (4), 6.
- *Hoeman, S. P. & Winters, D. M. (1990). Theory-based case management: High cervical spinal cord injury. Home Healthcare Nurse, 8 (1), 25-33.
- *Holy, M. (1992). Case management & community mobile psychiatric/treatment services: Expanded roles for the community psych nurse. Maryland Nurse, 11 (7), 8.
- *Holzemer, W. L. (1992). Linking primary health care and self-care through case management. <u>International Nursing Review</u>, 39 (3), 83-89.
- *Hudak, M. (1993). Implementing case management for a head and neck unit. ORL-Head and Neck Nursing, 11(2), 16-19.
- *Hurla, M. K. (1989). From primary nurse to case manager. <u>The Kansas Nurse</u>, 64 (12), 6-7.
- *Ison, A. (1991). Nursing case management: An innovative approach to care in the emergency department. Topics in Emergency Medicine, 13 (3), 35-46.

- *Jenkins, M. L. & Sullivan-Marx, E. M. (1994). Nurse practitioners and community health nurses: Clinical partnerships and future visions. <u>Nursing Clinics of North America</u>, 29 (3), 459-471.
- *Jennings, B. M. & Brosch, L. R. (1994). Clinical case management in the army medical department. Military Medicine, 159 (8), 548-553.
- *Joachim, G. (1989). The school nurse as case manager for chronically ill children.

 <u>Journal of School Health</u>, 59 (9), 406-407.
- *Juip, M. P. (1993). Implications of clinical advancement systems and nurse case managers on the diabetes educator. <u>Professional Development</u>, 19 (1), 77-78.
- *Kelly, K. C. (1992). Managing care: A search for role clarity. <u>Journal of Nursing Administration</u>, 22 (3), 9-10.
- *Kerfoot, K. & Luquire, R. (1993). Today's patient care unit manager. <u>Nursing</u>
 <u>Economics, 11</u> (5), 321-323.
- *Kerr, M. H. & Birk, J. M. (1988). A client-centered case management model.

 Quality Review Bulletin, 14 (9), 279-283.
- *Kifer, D. J. (1994). Case management of needle localized breast biopsy patients.

 <u>Seminars in Perioperative Nursing</u>, 3 (1), 46-54.
 - *King, M. L. (1992). Case management. <u>The Canadian Nurse</u>, <u>88</u> (4), 15-17.
- *Kirk, S. A., Koeske, G. F., & Koeske, R. D. (1993). Changes in health and job attitudes of case managers providing intensive services. <u>Hospital and Community</u>
 Psychiatry, 44 (2), 168-173.

- *Kirkhart, K. A., Steele, N. F., Pomeroy, M., Anguzza, R., French, W., & Gates, A. J. (1988). Louisiana's ventilator assisted care program: Case management services to link tertiary with community-based care. Children's Health Care, 17 (2), 106-111.
- *Kirkpatrick, J. (1992). Taking Charge: Helping patients get back to work. <u>RN, 55</u> (8), 21-23.
- *Knight, B. G. & Carter, P. M. (1990). Reduction of psychiatric inpatient stay for older adults by intensive case management. The Gerontologist, 30 (4), 510-515.
- *Knollmueller, R. N. (1989). Case management: what's in a name? <u>Nursing</u>
 Management, 20 (10), 38-42.
- *Koerner, J. G., Bunkers, L. B., Nelson, B., & Santema, K. (1989). Implementing differentiated practice: The Sioux Vallley Hospital experience. <u>Journal of Nursing</u>

 <u>Administration, 19</u> (2), 13-20.
- *Kortbawi, P. A. (1993). An orientation plan for hospital-based case managers. The Journal of Continuing Education in Nursing, 24 (2), 69-73.
- *Kramer, M. (1990). The magnet hospital: Excellence revisited. <u>Journal of Nursing</u>
 Administration, 20 (9), 35-44.
- *Krout, J. A. (1993). Case management activities for the rural elderly: Findings from a national study. Journal of Case Management, 2 (4), 137-146.
- *Ladden, M. (1991). On-site perinatal case management: An HMO model. <u>The Journal of Perinatal and Neonatal Nursing</u>, 5 (1), 27-32.
- *Lajeunesse, D. A. (1990). Case management: A primary nursing approach. <u>Caring Magazine</u>, 9 (8), 13-16.

- *Lamb, G. S. & Stempel, J. E. (1994). Nurse case management from the client's view: growing as insider-expert. <u>Nursing Outlook, 42</u> (10), 7-13.
- *Lamm, B., Dungan, J. M., & Hiromoto, B. (1991). Long-term lifestyle management.

 <u>Clinical Nurse Specialist</u>, 5 (4), 182-188.
- *Lear, G. (1992). Models: The right image emerges. <u>Nursing Management</u>, 23 (4), 89-91.
 - *Lear, G. (1993). Managing care at home. Nursing Times, 89 (5), 26-27.
- *Leath, C. & Thatcher, R. M. (1991). Team-managed care for older adults: A clinical demonstration of a community model. <u>Journal of Gerontological Nursing</u>, 17 (7), 25-28.
- *Leigh, B. (1993). Case management in a health maintenance organization: Improving quality of care. AAOHN Journal,41 (4), 170-173.
- *Leff, E. (1992). A short stay obstetrics program. <u>Nursing Management, 23</u> (11), 86-88, 90-91.
- *Lewis, C. C., Alford-Winston, A., Billy-Korna, M., McCaustland, M. D., & Tachman, C. P. (1992). Care management for children who are medically fragile/technology-dependent. <u>Issues in Comprehensive Pediatric Nursing</u>, 15 (2), 73-91. *Liljeblad, C. Y. (1993). Neonatal nurse practitioners: Paving the way for case management of chronically ill infants and their families. <u>Journal of Perinatal and Neonatal</u>

Nursing, 7 (3), 49-58.

*Lin, E. M. (1994). A combined role of clinical nurse specialist and coordinator:

Optimizing continuity of care in an autologous bone marrow transplant program. Clinical

Nurse Specialist, 8 (1), 48-55.

*Lippman, H. (1991). Is this the ideal hospital? RN, 54 (7), 46-49.

*Littman, E., Siemsen, J., & Beardselly, E. (1989). AIDS case management: A model for smaller communities? <u>Caring</u>, 8 (11), 26-31.

*Lombness, P. M. (1994). Difference in length of stay with care managed by clinical nurse specialists or physician assistants. Clinical Nurse Specialist, 8 (5), 253-260.

*London, J. (1993). On the right path: Collaborative case management makes nurse parners in the care-planning process. Health Progress, 74 (5), 36-38.

*Long, C. O., Ritz, J. A., & Wintergalen, B. (1992). Rehabilitation nursing: A curriculum for home care nurses. <u>Caring, 11</u> (8), 28-31.

*Long, T., Katz, K., Pokorni, J. (1989). Developmental intervention with the chronically ill infant. <u>Infants and Young Children, 1</u> (4), 78-88.

*Loveridge, C. E., Cummings, S. H., & O'Malley, J. (1988). Developing case management in a primary nursing system. <u>Journal of Nursing Administration</u>, 18 (10), 36-38.

*Lulavage, A. (1991). RN-LPN teams: Toward unit nursing case management.

Nursing Management, 22 (3), 58-61.

*Lundergard, L. (1993). Case management: What's it all about? Nebraska Nurse, 26 (1), 30.

*Lynam, L. (1994). Case mangement and critical pathways: Friend or foe? Neonatal Network, 13 (8), 48-51.

*Lynn-McHale, D. J., Fitzpatrick, E. R., & Shaffer, R. B. (1993). Case management: Development of a model. <u>Clinical Nurse Specialist</u>, 7 (6), 299-307.

*Lyon, J. C. (1993). Models of nursing care delivery and case management: Clarification of terms. <u>Nursing Economics</u>, 11 (3), 163-169.

*MacIsaac, A. M., Adamson, C. B., & Yates, M. A. (1991). Nursing's approach to the care of the elderly. <u>Advancing Clinical Care, 6</u> (6), 27-30.

*Mackety, C. J. (1990). Case management for laser surgery. <u>Laser Nursing</u>, 4 (1), 10-13.

*Mackety, C. J. (1990). Lasers in urology. <u>Nursing Clinics of North America</u>, 25 (3), 697-709.

*Madrid, C. (1994). Orthopedic case management in a collaborative practice setting.

Seminars in Perioperative Nursing, 3 (1), 13-15.

*Mahn, V. A. (1993). Clinical nurse case management: A service line approach.

Nursing Management, 24 (9), 48-50.

*Mann, A. H., Hazel, C., Geer, C., Hurley C. M., & Podrapovic, T. (1993).

Development of an orthopaedic case manager role. Orthopaedic Nursing, 12 (4), 23-27, 62.

*Mannon, J. A., Conrad, K. M., Blue, C. L., & Muran, S. (1994). A case management tool for occupational health nurses: Development, testing, and application. AAOHN Journal, 42 (8), 365-372.

- *Manthey, M. (1991). Delivery systems and practice models: A dynamic balance.

 Nursing Management, 22 (1), 28-30.
- Mark, B. A. (1992). Characteristics of nursing practice models. <u>Journal of Nursing Adminstration</u>, 22 (5), 57-63.
- *Marr, J. A. & Reid, B. (1992). Implementing managed care and case management:

 The neuroscience experience. <u>Journal of Neuroscience Nursing 24</u> (5), 281-285.
- Marschke, P., & Nolan, M. T. (1993). Research related to case management. <u>Nursing</u> Administration Quarterly, 17 (3), 16-21.
- *Martin, K. J. (1994). Case management: Importance to occupational health.

 AAOHN Journal, 42 (1), 8A-8B.
- *Martin, R. (1992). Development of clinical coordinator role. Nursing Management, 23 (10), 86-89.
- *Martinez, N. H., Schreiber, M. L., & Hartman, E. W. (1991). Pediatric nurse practitioners: Primary care providers and case managers for chronically ill children at home. Journal of Pediatric Health Care, 5 (6), 291-297.
- *Maurin, J. T. (1990). Case management: Caring for psychiatric clients. <u>Journal of Psychosocial Nursing, 28</u> (7), 7-12.
- *Mawn, B. & Bradley, J. (1993). Standards of care for high-risk prenatal clients: The community nurse case management approach. <u>Public Health Nursing</u>, 10 (2), 78-85.
- *Mawn, B., Karthas, N., Burke, K., Foster, S., Galvin, R., Hale, A., McIntosh, K., & Melchiono, M. (1994). Case management of the HIV-positive child and family. <u>AIDS</u>
 Patient Care, 8 (2), 76-78.

*McBride, L. H. (1995). The role of the transplant advanced practice nurse. <u>Critical</u>

<u>Care Nursing Quarterly, 17</u> (4), 48-54.

*McCloskey, J. C., Mass, M., Huber, D. G., Kasparek, A., Specht, J., Ramler, C., Watson, C., Blegen, M., Delaney, C., Ellerbe, S., Etscheidt, C., Gongaware, C., Johnson, M., Kelly, K., Mehmert, P. & Clougherty, J. (1994). Nursing management innovations:

A need for systematic evaluation. Nursing Economics, 12 (1), 35-44.

*McCormick, B. (1988). Managed care: Case management plan 'unbundles' managed care. Hospitals, 62, (18), 45.

*McCrone, P., Beecham, J., & Knapp, M. (1994). Community psychiatric nurse teams: cost-effectiveness of intensive support versus generic care. <u>British Journal of Psychiatry</u>, 165 (2), 218-221.

*McElroy, M. J. & Campbell, S. (1992). Case management with the nurse manager in the role of case manager in an interventional cardiology unit. <u>AACN Clinical Issues</u>, 3 (4), 749-759.

*McGowan, M. B. & Meador, N. N. (1988). Rehabilitation aids in home health care.

<u>Journal of Home Health Care Practice</u>, 1 (1), 49-59.

*McGurrin, M. C. & Worley, N. (1993). Evaluation of intensive case management for seriously and persistently mentally ill persons. <u>Journal of Case Management</u>, 2 (2), 59-65.

*McKenzie, C. B., Torkelson, N. G., & Holt, M. A. (1989). Care and cost: Nursing case management improves both. <u>Nursing Management</u>, 20 (10), 30-34.

*McNabb, M. S. (1994). HMO case management and the surgical patient. <u>Seminars</u> in Perioperative <u>Nursing</u>, 3 (1), 22-26.

- *Meisler, N. & Midyette, P. (1994). CNS to case manager: Broadening the scope.

 Nursing Management, 25 (11), 44-46.
- *Michaels, C. (1992). Carondelet St. Mary's nursing enterprise. <u>Nursing Clinics of North America</u>, 27 (1), 77-85.
- *Miller, L. L. & Miller, J. E. (1989). Selecting medical case management programs:

 The employer's/purchaser's perspective. Quality Review Bulletin, 15 (4), 121-126.

 *Molloy, S. P. (1994). Defining case management. Home Healthcare Nurse, 12 (3),
- *Monaco, R., Steinberg, M. C., Siler, P., Ellis, S., & Sanchez, M. (1995). On the road to perinatal case management. Emphasis: Nursing, 5 (1), 29-39.

51-54.

- *Morris, W. (1995). The clinical nurse specialist as case manager. <u>Emphasis:</u>
 Nursing, 5 (1), 49-54.
- *Morse, J. M. (1995). Exploring the theoretical basis of nursing using advanced techniques of concept analysis. Advances in Nurising Science, 17 (3), 31-46.
- *Moss, M. T. & O'Connor, S. (1993). Outcomes management in perioperative services. Nursing Economics, 11 (6), 364-369.
- *Moss, M. T. (1994). Practical implementation of outcomes oriented case management. Seminars in Perioperative Nursing, 3 (1), 40-45.
- *Moss, M. T. (1994). Nursing tools: A global perspective—three tools form a triangular analytical instrument, outcomes, management, case management and critical pathways. Nursing Management, 25 (6), 64A-64B.

- *Mound, B., Gyulay, R., Khan, P., & Goering, P. (1991). The expanded role of nurse case managers. <u>Journal of Psychosocial Nursing</u>, 29 (6), 18-22.
- *Muchemore, R. J. (1991). The business of case management. Nebraska Nurse, 24 (4), 5.
- *Muijen, M., Cooney, M., Strathdee, G., Bell, R., & Hudson, A. (1994). Community psychiatric nurse teams: Intensive support versus generic care. <u>British Journal of Psychiatry</u>, 165 (2), 211-217.
- *Nehls, N., Blahnik, L., Nestler, K., Richardson, D. (1992). A collaborative nurse-physician practice model for helping persons with serious mental illness. <u>Hospital and Community Psychiatry</u>, 43 (8), 842-844.
- *Neidig, J. R., Megel, M. E., & Koehler, K. M. (1992). The critical path: An evaluation of the applicability of nursing case management in the NICU. <u>Neonatal</u> Network, 11 (5), 45-51.
- *Nelson, J. (1993). Case mangement: Care across the continuum. The Kansas Nurse, 68 (3), 1.
- *Nelson, M. M. (1993). The race for victory in rehabilitation case management.

 Rehabilitation Nursing, 18 94), 253-254.
- *Newman, M., Lamb, G. S., & Michaels, C. (1991). Nurse case management: The coming together of theory and practice. <u>Nursing & Health Care</u>, 12 (8), 404-408.
- *Newman, M. A. (1990). Toward an integrative model of professional practice.

 <u>Journal of Professional Nursing, 6</u> (3), 167-173.

- *Norris, M. K. G. & Hill, C. (1991). The clinical nurse specialist: Developing the case manager role. <u>Dimensions of Critical Care Nursing</u>, 10 (6), 346-353.
- *Nugent, K. E. (1992). The clinical nurse specialist as case manager in a collaborative practice model: Bridging the gap between quality and cost of care. Clinical Nurse

 Specialist, 6 (2), 106-111.
- *O'Brien, S. (1995). Occupational health nursing roles: Future challenges and opportunities. <u>AAOHN Journal,43</u> (3), 148-152.
- *Odom, S. E., Herrick, C., Holman, C., Crowe, E., & Clements, C. (1994). Case management for children with attention deficit hyperactivity disorder. <u>Journal of School Nursing</u>, 10 (3), 17-21.
- *O'Hare, P. A. & Terry, M. A. (1991). Community-based care management: A framework for delivery of services. <u>Home Healthcare Nurse</u>, 9 (3), 26-32.
- *Oleson, M. & King, T. W. (1990). Back to the beginning. Nursing case management of the older client with laryngeal speech needs. <u>Journal of Gerontological Nursing</u>, 16 (12), 27-29.
- *Olivas, G. S., Del Togno-Armanasco, V., Erickson, J. R., & Harter, S. (1989a).

 Case management: A bottom-line care delivery model: The concept. <u>Journal of Nursing</u>

 Adminstration, 19 (11), 16-20.
- *Olivas, G. S., Del Togno Armanasco, V., Erickson, J. R., & Harter, S. (1989b).

 Case management--A bottom-line care delivery model: Adaptation of the model. <u>Journal of Nursing Administration</u>, 19 (12), 12-17.

*O'Malley, J. (1992). Future directions: Managing the cost--quality paradigm.

<u>Critical Care Nursing Quarterly, 15</u> (3), 80-85.

*O'Malley, J., Loveridge, C. E., & Cummings, S. H. (1989). The new nursing organization. Nursing Management, 20 (2), 29-32.

*Opuni, K. A., Smith, P. B., Arvey, H., & Solomon, C. (1994). The northeast adolescent project: A collaborative effort to address teen-age pregnancy in Houston, Texas. Journal of School Health, 64 (5), 212-214.

*Ovretveit, J. (1992). Fulfilling the need for a coordinated approach: Case management and community nursing. Professional Nurse, 7 (4), 264-269.

*Panzarino, P. J. & Wetherbee, D. G. (1990). Advanced case management in mental health: Quality and efficiency combined. Quality Review Bulletin, 16 (11), 386-390.

*Papenhausen, J. L. (1990). Case management: A model of advanced practice? Clinical Nurse Specialist, 4 (4), 169-170.

*Parette, H. P. (1993). High-risk infant case management and assistive technology:

Funding and family enabling perspectives. Maternal-Child Nursing Journal, 21 (2), 53-64.

*Parker, M. & Kappas-Larson, P. (1994). A critical question approach to geriatric

CM in the hospital. Hospital Case Management, 2 (6), 103-106.

*Parker, M., Quinn, J., Viehl, M., Mckinley, A., Polich, C. L., Detzner, D. F., Hartwell, S., & Korn, K. (1990). Nursing Economics, 8 (2), 103-109.

*Parker, M. & Secord, L. J. (1988). Case managers: Guiding the elderly through the health care maze. American Journal of Nursing, 88 (2), 1674-1676.

*Parker, M. & Secord, L. J. (1988). Private geriatric case management: Current trends and future directions. Quality Review Bulletin, 14 (7), 209-214.

*Pawling-Kaplan, M. & O'Connor, P. (1989). Hospice care for minorities: An analysis of a hospital-based inner city palliative care service. The American Journal of Hospice Care, 6 (4), 13-21.

*Pessin, N., Lindy, D., Hyer, K., & Dehm, K. (1991). Visiting nurse service of New York: Bringing the mental health clinic to the home. <u>Caring</u>, 10 (3), 24-28.

*Peterson, J. (1991). The role of the nurse manager in a case management delivery system. Pediatric Nursing, 17 (3), 282.

*Petryshen, P. R. & Petryshen, P. M. (1992). The case management model: An innovative approach to the delivery of patient care. <u>Journal of Advanced Nursing</u>, 17 (10), 1188-1194.

*Phillips, P. D., Applebaum, R. A., Atchley, S. J., McGinnis, R. (1989). Quality assurance strategies for home-delivered long term care. Quality Review Bulletin, 15 (5), 156-162.

*Pierini, D. (1988). Case managing the elderly: Best bet for the future. Health Progress, 69 (11), 42-45, 83.

*Pierog, L. J. (1991). Case management: A product line. <u>Nursing Administration</u>

Quarterly, 15 (2), 16-20.

*Pittman, D. C. (1989). Nursing case management: Holistic care for the deinstitutionalized chronically mentally ill. <u>Journal of Psychosocial Nursing</u>, 27 (11), 23-27.

*Pittman, K. P. (1991). "Care": A case management model for empowering hospital nurses. The Florida Nurse, 39 (10), 4, 6.

Polit, D. F. & Hungler, B. P. (1995). <u>Nursing Research: Principles and Methods.</u>
(5th Ed.). Philadelphia: J. B. Lippincott Company.

*Possin, B. (1991). A consortium introduces RN case management regionwide.

Nursing Management, 22 (3), 62-64.

*Prance, N. (1993). Travelling companions. <u>Nursing Times</u>, 89 (5), 28-30.

*Priebe, S. & Gruyter, T. (1993). The role of the helping alliance in psychiatric community care: A prospective study. The Journal of Nervous and Mental Disease, 181 (9), 552-557.

*Primm, P. L. (1988). Implementation of differentiated practice through differentiated case management. Michigan Nurse, 61 (8), 33.

*Putney, K. A., Hauner, J., Hall, T., & Kobb, R. (1990). Case management in long-term care: New directions for professional nursing. <u>Journal of Gerontological Nursing, 16</u> (12), 30-33.

*Quick, B. (1994). Integrating case management and utilization management.

Nursing Management, 25 (11), 52-56.

*Quinn, J. (1990). Managing the care system. <u>Journal of Gerontological Nursing</u>, 16 (8), 3.

*Quinn, J. (1994). Care in a changing world. <u>Journal of Gerontological Nursing</u>, 20 (11), 3.

- *Reinhard, S. C. (1988). Case managing community services for hip fractured elders.

 Orthopaedic Nursing, 7 (5), 42-49,71.
- *Reinhart, S. I. (1995). Uncomplicated acute mycardial infarction: A critical path.

 <u>Cardiovascular Nursing, 31</u> (1), 1-7.
 - *Repper, J. (1991). A suitable case for management? Nursing Times, 87 (12), 62-65.
- *Repper, J., Ford, R., & Cooke, A. (1994). How can nurses build trusting relationships with people who have severe and long-term mental health problems?

 Experiences of case managers and their clients. <u>Journal of Advanced Nursing</u>, 19 (6), 1096-1104.
- *Rheaume, A., Frisch, S., Smith, A., & Kennedy, C. (1994). Case management and nursing practice. Journal of Nursing Adminstration, 24 (3), 30-36.
- *Richardson, M., Student, E., O'Boyle, D., Smyth, M., & Wheeler, T. W. (1992).

 Establishment of a state-supported, specialized home care program for children with

 complex health-care needs. <u>Issues in Comprehensive Pediatric Nursing</u>, 15 (2), 93-122.
- *Riley, T. A. (1992). HIV-infectied client care: Case managment and the HIV team.

 <u>Clinical Nurse Specialist</u>, 6 (3), 136-141.
- *Ritter, J., Fralic, M. F., Tonges, M. C., & McCormac, M. (1992). Redesigned nursing practice: A case management model for critical care. <u>Nursing Clinics of North</u>

 <u>America, 27</u> (1), 119-128.
- *Roberts, G. A. (1994). Quality outcomes for case manager practice. <u>Aspen's Advisor for Nurse Executives</u>, 9 (9), 4-6.

*Robinson, J. A., Robinson, K. J., & Lewis, D. J. (1992). Balancing quality of care and cost-effectiveness through case management. ANNA Journal, 19 (2), 182-188.

Rodgers, B. L. (1993). Concept analysis: An evolutionary view. In B. L.Rodger, & K. A. Knafl (eds.) Concept Development in Nursing: Foundations, Techniques, and Applications. Philadelphia: W. B. Saunders Co.

*Rogers, J., Grower, R., & Supino, P. (1992). Participant evaluation and cost of a community-based health promotion program for elders. <u>Public Health Reports</u>, 107 (4), 417-426.

*Rogers, M., Riordan, J., & Swindle, D. (1991). Community-based nursing case management pays off. Nursing Management, 22 (3), 30-34.

*Rogers, M., Weyant, J., & Weyant, D. J. (1991). Community-based nurse case management: Meeting patient, physician, and hospital demands. The Kansas Nurse, 66 (5), 8-9.

*Ross, N. E. (1993). A hospital and community in partnership: "Case management coordinated care model in a community setting". <u>Leadership in Health Services</u>, 2 (6), 27-30.

*Rowland, J. O. (1994). Case management and critical paths in the PACU.

Breathline, 14 (1), 14, 18.

*Royer, K. (1994). A case management experience with cholecystectomies. <u>Seminars</u> in <u>Perioperative Nursing</u>, 3 (1), 3-12.

- *Rozell, B. R. & Newman, K. L. (1994). Extending a critical path for patients who are ventilator dependent: Nursing case management in the home setting. <u>Home</u>

 <u>Healthcare Nurse</u>, 12 (4), 21-25.
- *Rutkowsky, K. (1994). Case management of HIV-positive and AIDS patients.

 Journal of Home Health Care Practice, 6 (2), 55-62.
- *Ryan, C. S., Sherman, P. S., & Judd, C. M. (1994). Accounting for case manager effects in the evaluation of mental health services. <u>Journal of consulting and Clinical</u>
 Psychology, 62 (5), 965-974.
- *Ryan, M. E. & Martin, J. F. (1991). Surgical nurse liaison: Expediting the surgical admission process. <u>AORN Journal</u>, 53 (6), 1529-1535.
- *Salmond, S. W. (1990). An interview at Robert Wood Johnson University Hospital: ProACT model. Orthopaedic Nursing, 9 (1), 41-44.
- *Salmond, S. W. (1990). In-hospital case management: Responses to common questions and concerns. Orthopaedic Nursing, 9 (1), 38-40.
- *Sandhu, B. K., Duquette, A., & Kerouac, S. (1992). Care delivery modes. The Canadian Nurse, 88 (4), 18-20.
- *Schraeder, C., Shelton, P., Dworak, D., & Fraser, C. (1993). Alzheimer's disease:

 Case management in a rural setting. <u>Journal of Case Management</u>, 2 (1), 26-31.
- *Schroer, K. (1991). Case management: Clinical nurse specialist and nurse practitioner, converging roles. Clinical Nurse Specialist, 5 (4), 189-194.
- *Schryer, N. M. (1993). Nursing case management for children undergoing craniofacial reconstruction. <u>Plastic Surgical Nursing</u>, 13 (1), 17-26.

- *Schull, D. E., Tosch, P., & Wood, M. (1992). Clinical nurse specialists as collaborative care managers. <u>Nursing Management</u>, 23 (3), 30-33.
- *Schultz, P. R. (1991). Health access report: Managed care. <u>The Washington Nurse</u>, 21 (5), 16-17.
- *Seaman, J. R. & Seaman, L. H. (1991). Organizational issues in nursing case management. <u>Journal of Post Anesthesia Nursing</u>, 6 (4), 282-287.
- *Seaman, L. H. (1990). Preparation: The key to nursing case management. <u>Journal</u> of Post Anesthesia Nursing, <u>5</u> (3), 177-181.
- *Segal, H. E. (1990). Military managed care---The time is now! Military Medicine, 155 (12), 623-624.
- *Selby, T. L. (1988). Nurses find ways to ease shortage; recruit, retain. American Nurse, 20 (9), 1, 9-10.
- *Sherman, J. J. & Johnson, P. K. (1994). CNS as unit-based case manager. <u>Clinical Nurse Specialist</u>, 8 (2), 76-80.
- *Shiell, A., Kenny, P., & Farnsworth, M. G. (1993). The role of the clinical nurse coordinator in the provision of cost-effective orthopaedic services for elderly people.

 Journal of Advanced Nursing, 18 (9), 1424-1428.
- *Shortridge, L. M. (1990). Trends in primary health care education. <u>Nurse</u>

 <u>Practitioner Forum, 1</u> (3), 151-158.
- *Shuster, III, G. F. & Cloonan, P. (1989). Nursing activities and reimbursement in clinical case management. Home Healthcare Nurse, 7 (5), 10-15.

- *Shuster, III, G. F. & Cloonan, P. A. (1991). Home health nursing care: A comparison of not-for-profit and for-profit agencies. <u>Home Health care Services</u>

 Quarterly, 12 (1), 23-37.
- *Simmons, F. M. (1992). Developing the trauma nurse case manager role.

 <u>Dimension of Critical Care Nursing, 11</u> (3), 164-170.
- *Sinnen, M. T. & Schifalacqua, M. M. (1991). Coordinated care in a community hospital. Nursing Management, 22 (3), 38-42.
- *Smith, G. B. (1993). Using a cause-and-effect diagram to diagnose a case management false start. Nursing Quality Connection, 3 (6), 6, 11.
- Smith, G. B. (1995). Hospital-based case management: Reshaping health care for the 21st century. Continuing Education for Ohio Nurses. CME Resource, Sacramento, CA.
- *Smith, G. B., Danforth, D. A., & Owens, P. J. (1994). Role restructuring: Nurse, case manager, and educator. <u>Nursing Administration Quarterly</u>, 19 (1), 21-32.
- *Smith, J. (1991). Changing traditional nursing home roles to nursing case management. <u>Journal of Gerontological Nursing, 17</u> (5), 32-39.
- *Smith, L. D. (1994). Continuity of care through nursing case management of the chronically ill child. Clinical Nurse Specialist, 8 (2), 65-68.
- *Smith, M. C. (1993). Case management and nursing theory-based practice. <u>Nursing Science Quarterly</u>, 6 (1), 8-9.
- *Smith-Rooker, J. L., Garrett, A., & Hodges, L. C. (1993). Case management of the patient with pituitary tumor. Medsurg Nursing, 2 (4), 265-274.

- *Soehren, P. M. & Schumann, L. L. (1994). Enhanced role opportunities available to the CNS/nurse practitioner. Clinical Nurse Specialist, 8 (3), 123-127.
- *Solomon, R. (1991). Home care for HIV disease: A community-based model.

 Caring Magazine, 10 (7), 18-19, 56.
- *Sonsel, G. E. (1989). Case management in a community-based AIDS agency.

 Quality Review Bulletin, 15 (1), 31-36.
- *Sowell, R. L. & Meadows, T. M. (1994). An integrated case management model:

 Developing standards, evaluation, and outcome criteria. Nursing Administration
 Quarterly, 18 (2), 53-64.
- *Sparacino, P. S. A. (1991). The CNS-case manager relationship. <u>Clinical Nurse</u>

 <u>Specialist</u>, 5 (4), 180-181.
- *Sparacino, P. S. A. (1993). Case management revisited. <u>Clinical Nurse Specialist</u>, 7 (6), 294.
- *Spellbring, A. M. (1991). Nursing's role in health promotion. Nursing Clinics of North America, 26 (4), 805-814.
- *Steele, S. (1991). Nurse case management in a rural parent-infant enrichment program. Issues in Comprehensive Pediatric Nursing, 14 (4), 259-266.
- *Steele, S. (1993). Nurse and parent collaborative case management in a rural setting. Pediatric Nursing, 19 (6), 612-615.
- *Sterling, Y. M., Noto, E. C., Bowen, M. R. (1994). case management roles of clinicians: A research case study. Clinical Nurse Specialist, 8 (4), 196-201.

- *Stillwaggon, C. A. (1989). the impact of nurse managed care on the cost of nurse practice and nurse satisfaction. <u>Journal of Nursing Administration</u>, 19 (11), 21-27.
- *Strong, A. G. (1991). Case management of a patient with multisystem failure.

 <u>Critical Care Nurse</u>, 11 (6), 10-18.
- *Strong, A. G. (1992). Case management and the CNS. <u>Clinical Nurse Specialist</u>, 6 (2), 64.
- *Taban, H. (1993). The nurse case manger in acute care settings: Job description and function. <u>Journal of Nursing Administration</u>, 23 (10), 53-61.
- Thompson, K. S., Caddick, K., Mathie, J., Newlon, B., & Abraham, T. (1991).

 Building a critical path for ventilator dependency. American Journal of Nursing, 91 (7), 28-31.
- *Thornicroft, G. (1990). Case managers for the mentally ill. <u>Social Psychiatry and Psychiatric Epidemiology</u>, 25 (3), 141-143.
- *Travis, M. & Gwozdz, D. T. (1993). Nursing case management for patients with TURP. <u>Urologic Nursing</u>, 13 (2), 48-54.
- *Trella, R. S. (1993). A multidisciplinary approach to case management of frail, hospitalized older adults. <u>Journal of Nursing Administration</u>, 23 (2), 20-26.
- *Trinidad, E. A. (1993). Case management: A model of CNS practice. <u>Clinical</u>
 Nurse Specialist, 7 (4), 221-223.
- *Twyman, D. M. & Libbus, M. K. (1994). Case-management of AIDS clients as a predictor of total inpatient hospital days. Public Health Nursing, 11 (6), 406-411.

*Urbano, M. T., VonWindeguth, B., Siderits, P., & Studenic-Lewis, C. (1991).

Developing case managers for chronically ill children: Florida's registered nurse specialist program. The Journal of Continuing Education in Nursing, 22 (2), 62-66.

*Uzark, K., LeRoy, S., Callow, L., Cameron, J., & Rosenthal, A. (1994). The pediatric nurse practitioner as case manager in the delivery of services to children with heart disease. <u>Journal of Pediatric Health Care</u>, 8 (2), 74-78.

*Van Dongen, C. J. & Jambunathan, J. (1992). Pilot study results: The psychiatric RN case manager. <u>Journal of Psychosocial Nursing</u>, 30 (11), 11-14.

*Van Tassel, M. (1994). Case managers use entrepreneurial skills. <u>Hospital Case</u>

Management, 2 (8), 143.

*Van Tassel, M. L. (1994). How case managers can improve the discharge planning process. Hospital Case Management, 2 (2), 34-35.

*Vautier, A. F. & Carey, S. J. (1994). A collaborative case management program:

The Crawford Long Hospital of Emory University model. Nursing Administration

Quarterly, 18 (4), 1-9.

*Veenema, T. G. (1994). The ten most frequently asked questions about case management in the emergency department. <u>Journal of Emergency Nursing</u>, 20 (4), 289-292.

*Von Rotz, N. P., Yates, J. R., & Schare, B. L. (1994). Application of the case management model to a trauma patient. Clinical Nurse Specialist, 8 (4), 180-186.

*Wadas, T. M. (1993). Case management and caring behavior. <u>Nursing</u>

<u>Management</u>, 24 (9), 40-46.

- *Wagner, J. D. (1992). Case mangement of homeless families. <u>Clinical Nurse</u>

 <u>Specialist</u>, 6 (2), 65-71.
- *Walter, J. M. & Robinson, S. H. (1994). Nursing care delivery models in ambulatory oncology. <u>Seminars in Oncology Nursing</u>, 10 (4), 237-244.
- *Ward-Evans, S., Hodges, L. C., & Smith, J. (1991). A new role for neuroscience nurses: The case manager. Journal of Neuroscience Nursing, 23 (4), 256-260.
- *Waterreus, A., Blanchard, M., & Mann, A. (1994). Community psychiatric nurses for the elderly: well tolerated, few side-effects and effective in the treatment of depression. Journal of Clinical Nursing, 3 (5), 299-306.
- *Weinstein, R. (1991). Hospital case management: The path to empowering nurses. Pediatric Nursing, 17 (3), 289-293.
- *Wesley, M. L. & Easterling, A. (1991). Restructuring nursing services in the Mercy Health Services consortium: The St. Joseph Mercy Hospital, Pontiac Project. Nursing Administration Quarterly, 15 (4), 50-54.
- *Wessel, G. L., Prumo, M. O., & Harrison, P. (1989). School placement and the oxygen-dependent child. Journal of Pediatric Nursing, 4 (6), 435-436.
- *Whitman, M. (1991). Case mangement in head injury rehabilitation. Rehabilitation Nursing, 16 (1), 19-22.
- *Williams, F. G., Warrick, L. H., Christianson, J. B., & Netting, F. E. (1993). Critical factors for successful hospital-based case management. <u>Health Care Management Review</u>, 18 (1), 63-70.

- *Williams, R. (1992). Nurse case management: Working with the community.

 Nursing Management, 23 (12), 33-34.
- *Wimpsett, J. (1994). Nursing case management: Outcomes in a rural environment.

 Nursing Management, 25 (11), 41-43.
- *Wolfe, G. (1993). Cooperation or competition? Collaboration between home care & case management. Caring, 12 (10), 52-54, 56, 58-60.
- *Wolfe, K. (1990). Using information to optimize case management. <u>AAOHN</u>

 <u>Journal</u>, 38 (10), 504-506.
- *Wood, L. A. (1991). Geriatric case management: The time is now. <u>Journal of</u> Gerontological Nursing, 17 (4), 3.
- *Worley, N. (1991). Mental health: Advisor to the team. Nursing Times, 87 (33), 38-40.
- *Worley, N. K., Drago, L., & Hadley, T. (1990). Improving the physical healthmental health interface for the chronically mentally ill: Could nurse case managers make a difference? archives of Psychiatric Nursing, IV (2), 108-113.
- *Wright, J., Henry, S. B., Holzemer, W. L., & Falknor, P. (1993). Evaluation of community-based nurse case management activities fo symptomatic HIV/AIDS clients. Journal of the Association of Nurses in AIDS Care, 4 (2), 37-47.
- *Young, A. A. (1993). Case management: Are we ready? The Kansas Nurse, 68 (3), 1.
- *Young, H. M. & Haight, K. (1993). Case management in a retirement community.

 Nursing administration Quarterly, 17 (3), 34-38.

*Zander, K. (1988). Nursing case management: Resolving the DRG paradox.

Nursing Clinics of North America, 23 (3), 503-520.

*Zander, K. (1992). Focusing on patient outcome: Case management in the 90's.

Dimension of Critical Care Nursing, 11 (3), 127-129.

Appendix A Data Collection Sheet

| ID Number | Data Code | Surrogate Terms |
|-----------|-----------|-----------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Appendix B Data Collection Sheet

| ID Number | Data Code | Related Concepts |
|-----------|-----------|------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Appendix C Data Collection Sheet

| ID Number | Data Code | References |
|-----------|---------------------------------------|------------|
| | | |
| | | |
| | . Leave | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | · · · · · · · · · · · · · · · · · · · | |
| | | |
| • | | |
| | | |
| | | |

Appendix D Data Collection Sheet

| ID Number | Data Code | Antecedents |
|-----------|-----------|-------------|
| | | |
| : | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Appendix E Data Collection Sheet

| ID Number | Data Code | Attributes |
|-----------|-----------|------------|
| | | |
| | | |
| | | |
| | - | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | LWS | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Appendix F Data Collection Sheet

| ID Number | Data Code | Consequences |
|-----------|-----------|--------------|
| | | |
| | | |
| | | · |
| | | |
| | | |
| | · | |
| | | |
| ı | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | · . |